PB83-224667

Final Environmental Impact Statement Wastewater Treatment Facilities Las Cruces, New Mexico

(U.S.) Environmental Protection Agency
Dallas, TX

May 83

U.S. Department of Commerce
National Technical Information Service
NTIS

BIBLIOGRAPHIC INFORMATION

PB83-224667

Final Environmental Impact Statement, Wastewater Treatment Facilities, Las Cruces, New Mexico.

May 83

PERFORMER: Environmental Protection Agency, Dallas, TX. Region VI.
EPA-906/9-83-005

The City of Las Cruces operates wastewater treatment facilities which serve the City, the Town of Mesilla, New Mexico State University, and parts of Dona Ana County. Major problems include: (1) inadequate collection and treatment capacity to accommodate the substantial growth projected to occur within the planning area; and (b) an existing treatment facility that is inefficient and cannot meet state and federal standards regarding effluent quality. Alternatives regarding service area, collection system improvements, wastewater treatment, and sludge management were analyzed to accommodate expected sewage flows to the year 2005. As its preferred alternative, Las Cruces proposes to expand its service area slightly to conform to projected growth patterns, and to construct interceptor and collection sewers necessary to provide service throughout the urban area. EPA's preferred decision is to approve and support funding for the proposed alternative, because this is the most cost-effective way of achieving federal and state water-quality goals, improving the quality o, ...

KEYWORDS: *Environmental impact statements-final, *Sewage treatment.

Available from the National Technical Information Service, Springfield, Va. 22161

PRICE CODE: PC A04/MF A01

United States
Environmental Protection
Agency

Region 6
1201 Elm Street
Dallas TX 75270

EPA 906/9-83-005
May 1983

Water

PB83-224667

EPA

Environmental Impact Statement

Final

Wastewater Treatment Facilities

Las Cruces, New Mexico

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

United States
Environmental Protection
Agency

Region 6
1201 Elm Street
Dallas TX 75270

EPA 906/9-83-005
May 1983

Water

EPA

Environmental Impact Statement

Final

Wastewater Treatment Facilities

Las Cruces, New Mexico

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

May 6, 1983

TO ALL INTERESTED AGENCIES, OFFICIALS, PUBLIC GROUPS AND INDIVIDUALS:

Enclosed is a copy of the Final Environmental Impact Statement (EIS) on the awarding of a grant under Section 201 of the Clean Water Act for construction of wastewater treatment facilities which would serve the City of Las Cruces, the Town of Mesilla, New Mexico State University, and parts of Dona Ana County, New Mexico. This EIS has been prepared in compliance with the National Environmental Policy Act of 1969 and implementing regulations.

The Final EIS is being distributed to those who made comments on the Draft EIS and to those who requested a copy. The document is also available for review at the Las Cruces City Hall.

Comments or inquiries on this EIS should be addressed to Mr. Clinton B. Spotts, Regional EIS Coordinator at the above address by JUN 27 1983

Sincerely yours,

Dick Whittington, P.E.
Regional Administrator

FINAL ENVIRONMENTAL IMPACT STATEMENT

WASTEWATER TREATMENT FACILITIES
LAS CRUCES, NEW MEXICO

Responsible Agency: U.S. Environmental Protection Agency, Region VI

Action being considered: Possible awarding of construction funds for wastewater treatment facilities for the City of Las Cruces, New Mexico.

Cooperating Agencies: New Mexico Environmental Improvement Division
New Mexico Department of Agriculture

Contact for further information:

Clinton B. Spotts, Regional EIS Coordinator
U.S. Environmental Protection Agency, Region VI
1201 Elm Street
Dallas, Texas 75270
Phone: Commercial (214) 767-2716
FTS 729-2716

Abstract: The City of Las Cruces operates wastewater treatment facilities which serve the City, the Town of Mesilla, New Mexico State University, and parts of Dona Ana County. Major problems include: a) inadequate collection and treatment capacity to accommodate the substantial growth projected to occur within the planning area; and b) an existing treatment facility that is inefficient and cannot meet state and federal standards regarding effluent quality. Alternatives regarding service area, collection system improvements, wastewater treatment, and sludge management were analyzed to accommodate expected sewage flows to the year 2005. As its preferred alternative, Las Cruces proposes to expand its service area slightly to conform to projected growth patterns, and to construct interceptor and collection sewers necessary to provide service throughout the urban area. This will principally impact non-agricultural lands northeast of the existing service area. The City proposes to use the existing plant site, and to replace the current treatment facility with a roughing filter followed by activated sludge treatment. The capacity of the new plant would be 8.9 mgd, an increase of about 100 percent over existing conditions. Sludge would be disposed of by injection on mesa lands west of the City. EPA's preferred decision is to approve and support funding for the proposed alternative, because this is the most cost-effective way of achieving federal and state water-quality goals, improving the quality of the Rio Grande, and protecting prime agricultural lands.

Date Comments Due: JUN 27 1983

Responsible Official:

Dick Whittington, P.E.
Regional Administrator

TABLE OF CONTENTS

	PAGE
PREFACE	ii
PART I. SUMMARY OF DRAFT AND FINAL EIS	I - 1
A. Existing Problems	I - 1
B. Project Alternatives Considered by Applicant	I - 1
C. Comments on Draft EIS	I - 6
D. Preferred Alternatives	I - 8
PART II. CONSULTATION AND COORDINATION	
A. Public Participation Prior to Release of the Draft EIS	II- 1
B. Review of Comments on the Draft EIS	II- 2
C. Responses to Comments	II- 5
D. Other Events Subsequent to Release of Draft EIS	II- 8
PART III. MODIFICATIONS AND CORRECTIONS TO THE DRAFT EIS	
A. Errata	III- 1
B. Page Revisions	III- 2
PART IV. PREFERRED ALTERNATIVES	
A. Position of City and CAC	IV- 1
B. Proposed EPA Decision	IV- 1

List of Figures and Tables

Figure I-1.	Proposed Interceptors and Service Area	I - 2
Table I-1.	Evaluation of Treatment Alternatives	I - 5
Table I-2.	Evaluation of Sludge Management Alternatives	I - 5
Table I-3.	Summary of Impacts of Applicant's Preferred Alternative	I - 7
Table II-1.	Comments on the Draft EIS	II - 3

List of Appendices

Appendix A. Responsiveness Summary for Public Hearing
Appendix B. Comment Letters and Responses
Appendix C. Public Participation Evaluation

PREFACE

On February 26, 1982 the U.S. Environmental Protection Agency (EPA) filed a Draft Environmental Impact Statement (EPA 906/9-82-002) regarding wastewater treatment facilities in the City of Las Cruces, New Mexico. Since that time, EPA has received and reviewed public comments on the Draft EIS, and has determined its preferred course of action with regard to the funding of treatment facilities in Las Cruces.

This document is the Final Environmental Impact Statement (Final EIS) on the awarding of construction grants for the proposed upgrading of wastewater treatment facilities in the City of Las Cruces, New Mexico. Since responses to comments received on the Draft EIS did not require significant changes in data or analyses, the Draft EIS was not reprinted in full. This Final EIS incorporates the Draft EIS by reference and identifies all written and oral comments received during public review, the responses to those comments, and additions and corrections to the Draft EIS text resulting from public review. The Draft EIS and this Final EIS, together, constitute the complete Final Environmental Impact Statement.

The Final EIS contains four parts and three appendices. The four parts are: a summary which presents the major conclusions of the Draft and Final EIS (Part I); a review of the public and agency comments on the Draft EIS, including responses to the major issues and an update on the planning process (Part II); revisions to the Draft EIS made in response to comments (Part III); and a discussion of the preferred alternatives identified by formal participants in the planning process (Part IV). A responsiveness summary for the Public Hearing is presented in Appendix A. Comment letters received regarding the Draft EIS are included in Appendix B. An evaluation of the public participation process is presented in Appendix C.

A copy of the Draft EIS is available for review at each of the depositories listed on page II-2. A limited number of copies of the Draft EIS are also available from the EPA Regional Office (see cover page for the phone number and address).

Both the Draft EIS and Final EIS were prepared with the assistance of Lee Wilson and Associates, Inc. A list of persons involved in the preparation of the two documents is presented in Draft EIS Chapter 8.

Part I

Summary of Draft EIS and Final EIS

PART I. SUMMARY OF DRAFT AND FINAL EIS

A. EXISTING PROBLEMS

The City of Las Cruces owns and operates wastewater collection and treatment facilities serving the City, the Town of Mesilla, New Mexico State University, and parts of Dona Ana County. Existing treatment is insufficient to meet existing state and federal standards and the capacity of collection and treatment facilities is insufficient to accommodate projected growth. Alternatives to solve these problems must consider, in addition to economic and engineering factors, regional water-quality objectives, water-rights constraints, and the need to minimize impacts to prime agricultural lands. Because there is no comprehensive land use plan, decisions regarding the placing of major interceptors and treatment facilities could have a major influence on development patterns in Las Cruces over the next 25 years.

B. PROJECT ALTERNATIVES CONSIDERED BY APPLICANT

No Action. The alternative of taking no action has been rejected by the City because failure to address the problems cited in section A, above, would cause continued violation of federal effluent regulations and, possibly, a court-mandated sewer hookup ban limiting development within the City. If this occurs, there probably would be widespread, uncontrolled growth on the prime agricultural lands of the Mesilla Valley outside the City limits. At a minimum, some steps must be taken to resolve the existing inadequacies in the treatment system, and to deal responsibly with the anticipated growth of the community.

Service Area. The single most complex issue faced during the planning process was the determination of the most appropriate service area for the municipal wastewater collection system. The debate focused on the extent to which the existing service area (Figure I-1) should be enlarged, with special concern about expansion into the agricultural lands of the Mesilla Valley north and south of the existing system limits. The proposed service area, illustrated in Figure I-1, would extend sewers to all areas where extensive urban development is expected, and conforms to the growth pattern which is supported by other public investments. Extension of the service area farther into the Mesilla Valley was rejected because the valley is prime farmland which may not urbanize rapidly if sewer service is not provided. Also, the valley has no major sanitation problem associated with the use of on-site wastewater systems, and so there is no environmental problem requiring sewer extensions.

The proposed service area will encourage a compact and relatively efficient development pattern. Major growth would occur immediately adjacent to the existing urban area, primarily east of Interstate 25 and north, slightly beyond the existing city limits. There would also be significant

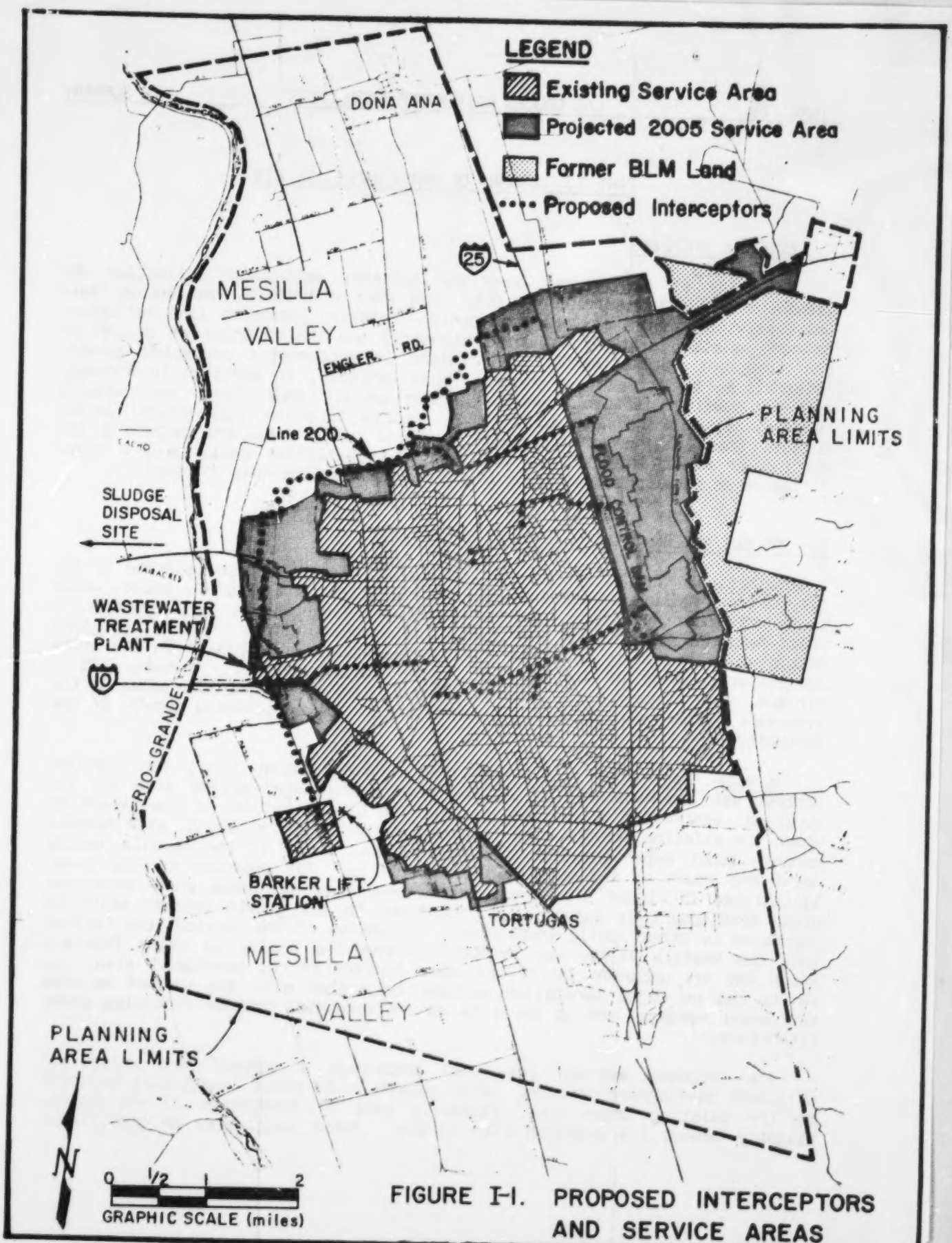

FIGURE I-1. PROPOSED INTERCEPTORS AND SERVICE AREAS

infilling within the already developed urban area, and scattered developments in the Mesilla Valley north and south of Las Cruces. The service area can be modified if growth patterns change from those now predicted. In particular, service could be extended eastward when former Bureau of Land Management (BLM) lands become available for urban development (see Figure I-1). Similarly, service can be extended northward to or beyond Engler Road, if this area grows substantially as predicted by County officials (see Figure 1-1).

This development pattern is expected to reduce the rate at which valley farmland is urbanized. Sewer service would be provided to approximately 900 acres of farmland. Although urbanization of this acreage is a significant adverse environmental impact, it is unavoidable since the same amount of acreage probably must be taken out of production simply to transfer water rights to the City of Las Cruces. An additional 1,100 acres of farms are likely to be developed outside the service area, in low-density, rural subdivisions. The total loss of farmland, 2,000 acres, is far less than the 7,000 acres which would be developed if historic growth patterns were continued.

The proposed service area has significant environmental benefits, because it will relieve development pressures on agricultural lands. The benefits include: support for agricultural production of food and fiber, preservation of greenbelt/wildlife areas, comparatively minimal intrusion of urban activity (traffic, dust, noise) into rural areas, and reduced fragmentation of irrigated parcels. During the public participation process, these benefits received strong community support.

Collection System. The collection system alternatives derive from the need to construct interceptors in areas of existing and projected growth, and from the need to correct existing problems, especially overloaded lift stations. Engineering and economic criteria were the basis for selecting the preferred alternatives, except that specific routes for major interceptors were chosen to minimize the environmental impact of construction.

The Applicant proposes to upgrade all lift stations and to construct major interceptors as shown in Figure I-1. This proposal conforms to the service area as described above. The major action is to construct a large interceptor near the western and northern limit of the service area, to relieve existing overloading and to accommodate projected growth in the northeast portion of the service area. Additional lines would provide service in the central part of Las Cruces and to the east behind the flood control dam. A new force main would be constructed from the Barker Lift Station to the treatment plant. Interceptor routes follow arroyos or are located in presently undeveloped areas. This should provide benefits by minimizing utility relocations, traffic disruptions, noise and dust. However, lines located in arroyos have the potential to adversely effect erosion and sedimentation; these adverse impacts require mitigation during project design and construction.

Wastewater Treatment and Disposal. By the year 2005, the service area in Figure I-1 would collect wastewater from an estimated 90,000 residents (leaving 13,800 persons to use on-site systems). This will require treatment

facilities having a capacity of 8.9 million gallons per day (mgd), compared to the existing flow of 4.6 mgd, and the existing treatment capacity of 2.9 mgd. The Applicant considered 15 different treatment alternatives. Eight were rejected during an initial screening: rehabilitation of the existing plant; land application options; aquaculture; extended aeration; oxidation lagoons; and others. Alternative plant sites (and operation of multiple plants) also were rejected after initial evaluation, because of added costs without commensurate benefits.

Seven alternatives were subjected to detailed analysis and are listed in Table I-1; the table includes the total dollar cost of each treatment process and a comparative ranking of the alternatives with respect to a number of economic, engineering and environmental issues. On the basis of the rankings, the Applicant considers that two of the alternatives are most cost-effective. Alternative 3, conventional activated sludge treatment, has the lowest dollar cost and is considered to be the best choice from an engineering point of view. Alternative 6, trickling filter treatment followed by activated sludge polishing, has virtually the same cost as alternative 3, but has two major advantages: first, a part of the option could be phased in quickly to solve the existing problems at the treatment plant; and second, if NPDES regulations were relaxed (see discussion p. 5-25 of the Draft EIS), the full plant need never be built, and the costs of treatment would be substantially reduced. Because of these benefits, which have received strong public support, alternative 6 is preferred by the Applicant.

Wastewater Reuse. Wastewater now discharged by the City of Las Cruces is fully utilized downstream, primarily for farming in New Mexico, Texas and Mexico. Any change in the discharge pattern would adversely affect the downstream users and raises water-rights issues. A more formal type of agricultural reuse (land application) was rejected because of the large acreage requirement, the uncertain availability of land, cropping restrictions, high costs, and management obstacles.

Sludge Management. Many options exist for sludge thickening, stabilization, dewatering, further treatment, and disposal. The following specific processes were rejected after initial screening: thickening by dissolved air flotation or centrifuge; stabilization by lime, chlorine treatment, or aerobic digestion; dewatering by vacuum filter, pressure filter, centrifuge, or drying lagoons; advanced treatment by chemical, heat, or radiation methods; and disposal by incineration, cogeneration, raw sludge landfill, or sludge/sewage composting. Reuse alternatives, such as sludge sale, giveaway, and parks application, were rejected for a number of reasons, including the lack of a market for highly treated sludge and the need to restrict public access to sites where less-treated sludge is utilized. However, the remaining alternatives involve some type of sludge stockpiling, and reuse can be considered in the future if appropriate.

Based on the screening, gravity thickening of primary and secondary sludge is appropriate as part of any sludge management scheme. Detailed evaluations were performed on four alternatives for stabilization, dewatering and disposal

TABLE I-1. EVALUATION OF TREATMENT ALTERNATIVES.

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
	2.9/6.0 Combination	Oxidation Tower	Activated Sludge	Rotating Bio. Contactors	Activated Bio-Filter	Rough Filter Act. Sludge	Aerated Lagoons
Present Worth of All Costs	$18,732,000	$24,239,000	$17,708,000	$21,543,000	$18,299,000	$17,867,000	$20,288,000
Evaluation Parameters:							
Dollar Costs	1	3	1	2	1	1	2
Energy Use	3	3	1	1	2	1	3
Operational Ease and Reliability	3	2	2	2	2	2	1
Process Control Flexibility	3	3	1	3	2	2	3
Adaptability to Future Conditions	3	3	2	3	2	1	3
Environmental Considerations	3	1	1	1	1	1	3
Interim Solution	3	3	2	2	3	1	3
Public Acceptance	2	3	1	2	2	1	3
TOTAL OF RANKINGS	21	21	11	18	16	10	21

1 is 'best'; 3 is 'least desirable'.

Source: Molzen-Corbin, 1981a; Lee Wilson and Associates, 1981a.

TABLE I-2. EVALUATION OF SLUDGE MANAGEMENT ALTERNATIVES.

	Alt. 1	Alt. 2	Alt. 3	Alt. 4
	Anaerobic Digestion/ Wet Injection	Ana. Digest./ Drying Beds/ Landfill	Thermal Cond./ Drying Beds/ Landfill	Filter Press/ Composting/ Landfill
Present Worth of All Costs	$9,766,000	$10,987,000	$11,964,000	$13,711,000
Evaluation Parameters:				
Dollar Costs	1	2	2	3
Energy Use	1	1	2	3
Resource Recovery	1	1	1	1
Operational Ease and Reliability	1	1	2	3
Process Control Flexibility	3	3	1	2
Environmental Considerations	1	1	1	1
Interim Solution	1	2	3	3
Public Acceptance	1	2	3	3
TOTAL OF RANKINGS	10	13	15	19

1 is 'best'; 3 is 'least desirable'.

Source: Molzen-Corbin, 1981a; Lee Wilson and Associates, 1981a.

of the sludge. Table I-2 includes the total dollar cost of each treatment process, and a comparative ranking of the alternatives with respect to a number of economic, engineering and environmental issues. Because of its low cost and otherwise acceptable characteristics, the Applicant's preferred choice is alternative 1. This approach would involve: anaerobic digestion of raw sludge (which produces methane gas which can be used to help meet the energy requirements of the new plant); truck transport of the wet sludge to a site on the mesa west of the City; injection of the sludge into the soil; and protection of the site against public access and growth of food chain crops. The City is now considering a site approximately 3.5 miles due east of the site shown in Figure 5-4 of the Draft EIS; environmental conditions are generally similar in both locations. Use of this second site would result in no change in the environmental impacts of sludge disposal, except that transportation costs and energy use would be less than if the original site were utilized. A variation on this alternative, using a site near the treatment plant, is less expensive but was rejected because of the potential for ground-water contamination.

Other Alternatives. Specific alternatives were considered and (as appropriate) selected for: on-site wastewater systems management; effluent disinfection processes; energy conservation; odor reduction; water conservation and flow reduction; management of other wastewater sources; administrative alternatives; and project funding.

Of these, funding received most of the public input, because the local costs of the proposed project range from $449,000 to over $3,573,000 per year depending on the amount of the federal and state funds (if any) which are granted to support the facility design and construction. The preferred method of cost-recovery would design sewer rates so that those who benefit from new facilities would pay for them. Residential sewer fees could reach $30 per month at one hundred percent local financing. Increased hookup charges, stand-by charges, and other cost-recovery mechanisms are being considered to offset this rate increase.

Impacts of Preferred Alternative. Table I-3 summarizes the environmental impact of the Applicant's preferred alternative.

C. COMMENTS ON DRAFT EIS

The relatively few comments on the Draft EIS included suggestions to study additional alternatives, especially rapid infiltration. Review of these alternatives indicates they are not as cost-effective as the Applicant's preferred alternative. Most other questions addressed specific technical aspects of the Draft EIS which were unclear or incorrect. An Errata section in the Final EIS provides corrections to the Draft EIS in response to these questions.

In response to issues raised by EPA, certain elements of the facilities plan have been revised; corresponding changes in the Draft EIS are discussed

TABLE 1-3. SUMMARY OF IMPACTS OF THE APPLICANT'S PREFERRED ALTERNATIVE.

Adverse impacts are generally those which cannot be avoided by the No Action Alternative: most of the adverse impacts can be mitigated. In addition to impacts identified below, substantial short-term benefits are associated with construction jobs, expenditures.

ENVIRONMENTAL RESOURCE	SHORT-TERM ADVERSE IMPACTS	LONG-TERM ADVERSE IMPACTS	MITIGATION MEASURES	LONG-TERM BENEFITS
EARTH RESOURCES	Accelerated water erosion resulting from construction of facilities, especially where sewer lines lie in or cross an arroyo	Sludge injection site could experience increased wind erosion, metals build-up in soils	Erosion control measures such as berms, desilting basins; construction during low wind/rain season; recontouring and reseeding; stabilize bank cuts structurally. Monitoring at sludge site; use of sludge site soils for soil conditioning	Improved soil properties at sludge injection site (possibly enabling ultimate recycling of soil)
WATER RESOURCES	Dewatering during construction could cause water-table lowering, odors, water-quality changes	Interceptor 230 is located in a flood hazard zone	Identify potentially impacted wells; use sand-point wells to minimize siltation from dewatering. Structurally stabilize bank cuts in flood hazard zones; use sealed, locking manholes flush with ground surface to avoid aesthetic impacts and obstruction of flood waters	Increased flows in Rio Grande due to greater wastewater discharge; all effluent will be recycled downstream Improved quality of the Rio Grande, due to enhanced quality of effluent
AIR & SOUND QUALITY	Equipment exhausts, dust and noise during construction	Small increase in emissions, noise at treatment plant	Spray or mulch disturbed surfaces; reseed; enforce OSHA standards to protect against construction noise	Reduced odors at lift station, treatment plant
BIOLOGY	Temporary loss of vegetation and habitat at some construction sites, especially arroyos	Clearing of 40 acres at sludge injection site	Limit work to designated construction sites; protection of trees; no use of pesticides, herbicides, or defoliants. Leave strips of natural vegetation and soil at sludge site to reduce erosion and enhance habitat value	Improved aquatic habitat in Rio Grande; productivity and habitat value of sludge injection site ultimately improved
ARCHAEOLOGY & HISTORICAL RESOURCES	Impaired quality of visitor experience in historic zones during construction	Possible loss of archaeological resources at all new facilities; possible foundation damage to historic buildings	Selective use of compaction methods in order to avoid foundation damages; perform site surveys prior to construction, with evaluation, rerouting, or salvage as necessary	Improved quality of visitor experience due to reduction of odors from lift stations adjacent to La Mesilla Historical District
SOCIO-ECONOMICS AND LAND USE	Traffic and utility disruption along construction corridors; reduced access to businesses	104 acres of grazing land converted to use as solid waste disposal site Substantial increases in sewer rates 2000 acres of prime farmland urbanized (900 of them in area served by sewers)	Plan construction to minimize traffic and utility disruptions. Use alternative methods to retire high cost revenue bonds, such as sales tax, increases connection fees, stand-by charges, aggressive extension policy, possible public trust ownership	Collection system supports compact urban form which will minimize impacts on agricultural land while supporting public investements; compact urban form has many secondary benefits, such as reduced travel (hence less air pollution, energy use); less disruption of rural environment
ENERGY & OTHER RESOURCES	Utilization of energy and resources during construction	Wastewater treatment requires major commitments of funds, labor, energy, materials	Produce and use methane gas; capture and reuse engine jacket and exhaust heat; insulate digesters; use air lift pumps; use of sectionalized and deepened aeration basins; possible solar applications	Net reduction in per capita resource use for wastewater treatment; methane recycling recovers energy value of sludge

in Part II of this Final EIS. The reviews and revisions account for the time gap between the Draft and Final EIS. The City has entered into an Assurance of Discontinuance with the New Mexico Environmental Improvement Division, which requires that interim effluent standards be met by mid-1983. The City is beginning to implement the sludge disposal portion of its preferred action as one of several steps toward meeting this deadline; funding for the sludge program is being sought from EPA through extension of an existing grant.

D. PREFERRED ALTERNATIVES

The City of Las Cruces has selected the alternative which was recommended by the facilities plan engineer, endorsed by the Citizens Advisory Committee, and adopted by the Steering Committee of the Joint Powers. This alternative calls for extensive interceptor construction with some lift station and collection system improvements. Proposed interceptors would provide capacity for 40 years of development to the north and/or east; no additional capacity is proposed for areas south or west of Las Cruces. A new treatment plant (with some use of existing facilities) would be built adjacent to the existing plant. The treatment process would include a roughing filter followed by abbreviated activated sludge and chlorination. This facility would be capable of treating 8.9 mgd of effluent in compliance with NPDES permit requirements. Effluent would be discharged to the Rio Grande as at present. Wet sludge would be trucked to the west mesa and disposed of by injection on a controlled-access site. Further information on the alternative is provided in Appendix B of the Draft EIS. The cost of the proposed facilities is:

interceptors and related improvements	$10,107,000
treatment works and sludge management	$21,788,000
TOTAL COST	$31,895,000

Note that this cost is exclusive of the expense of constructing collection systems in areas of new development.

The preferred alternative is viewed by the Applicant as being: 1) the most adaptable in the face of changing federal regulations for effluent and sludge disposal; 2) the most flexible in terms of construction and operation especially for near-term solution of NPDES compliance problems; and 3) comparatively inexpensive in total dollars (the preferred alternative is less than one percent more costly than the lowest cost alternative).

The proposed decision of the United States Environmental Protection Agency is to fund grant-eligible portions of the Applicant's preferred alternative, subject to availability of funds and to priority designations. The final decision will be presented in a Record of Decision, which EPA will issue following the review period for this Final EIS. The New Mexico Environmental Improvement Division has indicated support for the proposed facilities and has approved the proposed grant extension for sludge facilities. The agency will evaluate funding alternatives on other elements of the plan at such time as formal grant applications are submitted by the City.

Part II

Consultation and Coordination

PART II. CONSULTATION AND COORDINATION

This Part of the Final EIS briefly discusses the public participation prior to preparation of the Draft EIS (Section A), explains the process through which the Draft EIS received public review and summarizes the comments received (Section B), provides an overview of EPA's responses to the major issues raised by the respondants (Section C), and discusses changes in the facilities plan which have occurred since the Draft EIS was issued (Section D).

A. PUBLIC PARTICIPATION PRIOR TO RELEASE OF THE DRAFT EIS

Chapter 7 of the Draft EIS contains a summary of public involvement in the planning of wastewater facilities for Las Cruces. Public input was received principally through three mechanisms: 1) a formal scoping meeting held on July 31, 1980; 2) frequent meetings of the Citizens Advisory Committee (CAC) appointed by the Joint Powers; and 3) public meetings held by the CAC. At the CAC and public meetings, the following issues were addressed:

1) problems the area may experience during the interim while the City is designing and constructing a new wastewater facility;

2) the possibility that effluent standards could be relaxed during the plant design phase, making it desirable to modify plans in the construction phase;

3) the need to monitor population projections and the planning area throughout the planning period for indications of significant irregularity;

4) the need to insure, in siting the plant, that optimum use is made of gravity flow and of presently in-place sewer lines;

5) the need to avoid discriminating against farmers who wish to subdivide marginal farm land;

6) the environmental impact of the plant site and the need to preserve prime agricultural land from high-density development;

7) the need to promote growth toward the north and east of the City where funds have already been allocated and spent for infrastructure;

8) odor problems experienced by the residents of the Town of Mesilla as a result of malfunctioning of the Barker Road Lift Station;

9) the need to avoid proliferation of sewer districts if high-density housing to the south is to be discouraged;

10) costs associated with a new wastewater facility and the need for innovative, energy-efficient methods of waste disposal; and

11) funding of a new facility should federal funding no longer be available once the construction phase is reached.

Also see Table 7-1 of the Draft EIS for additional information on issues raised during the planning process.

B. REVIEW OF AND COMMENTS ON THE DRAFT EIS

The Notice of Availability of the Draft Environmental Impact Statement appeared in the Federal Register February 26, 1982. The Notice announced a 60-day public review period ending April 12, 1982. The public review period was scheduled to provide concerned agencies and the public an opportunity to review the Draft EIS and to offer comments on the adequacy of the draft statement and the environmental impact of the proposed action and its alternatives.

Over 275 copies of the Draft EIS were distributed to reviewing agencies and to interested members of the public. Copies of the Draft EIS also were made available to the public at two locations in the Las Cruces area. During the review period for the Final EIS, copies of the Draft EIS will be available at the following depositories:

1. City Hall, Las Cruces, New Mexico
2. New Mexico Environmental Improvement Division, 725 St. Michaels Drive, Santa Fe, New Mexico

The Public Hearing was held in Las Cruces, New Mexico, on March 29, 1982. Public comment on the awarding of funds for wastewater treatment facilities in Las Cruces was solicited through formal oral testimony and written statements. In addition to announcement of the meeting in the above referenced Federal Register, the public was notified by advertisements in the Las Cruces Sun News and use of EPA's mailing list. Seven people spoke at the Public Hearing, excluding government officials and consultants involved in preparation of the EIS.

During the public review period, 13 comment letters were received. Along with the hearing record, each letter was reviewed to determine if it contained substantial comments which required a response in the Final EIS. Comments which presented new data, questioned facts and/or analyses, or commented on the issues bearing directly on the Draft EIS or the environmental impacts were fully evaluated and responded to, and as appropriate, changes or additions to the text of the Draft EIS have been incorporated into this Final EIS.

Table II-1 summarizes the comments received on the Draft EIS. Table II-1 is organized into three parts: Part 1 reviews comments received at the Public Hearing; Part 2 presents comments received from government agencies which have a formal role in EIS review; and Part 3 presents comments expressed by the general public in letter form. Parts 2 and 3 identify the sequence or control number assigned to each letter; these numbers will be used to refer to letter

TABLE II-1. COMMENTS ON THE DRAFT EIS.

Part 1 of the Table lists comments received at the Public Hearing; Part 2 presents comments received from government agencies which have a formal role in EIS review; and Part 3 presents comments expressed by the general public in letter form. Appendix A to the Final EIS contains a responsiveness summary which identifies issues raised at the Public Hearing and EPA's response to these issues. Appendix B to the Final EIS contains copies of all letters received. All letters are assigned a sequential number, or control number, beginning with 1 for the first letter in the table; letters in Appendix B are presented in numerical order with their response.

1. PUBLIC HEARING: MARCH 29, 1982, LAS CRUCES, NEW MEXICO

A. Members of the Citizens Advisory Committee (CAC):

Dr. Jane Allen, Chairperson. CAC supports proposal; land use maps need corrections.

Jim White. Land use maps contain gross errors; connection fee discussion needs revision; questioned whether EPA selected Lee Wilson and Associates as the EIS consultant.

Richard McCowen. No real consideration of alternatives was given, especially a southside treatment plant which would have benefited Mesilla and allowed elimination of the Mesilla lift station; impact of new prison on population needs to be considered.

B. Other Citizens:

Anne Kapp. Mesquite street sewer line problem should be corrected without waiting for a federal grant; 3 maps need correction; revise capital facilities tables and connection fee discussion.

Dr. Hale Huber, Mesilla Valley 2000. Supports proposed action which will minimize impacts on agricultural lands.

Klaus Wittern. Public participation process is not effective; year 2005 population is underestimated; asked about selection of engineers for design before the facilities plan has been approved; costs need to consider inflation correctly; asked about what will happen if there is no funding; suggested another alternative be considered (see letter 12).

Ron Hudson. Inquired as to how public comments are reflected in the Final EIS and in the decision making.

2. GOVERNMENT AGENCY REVIEW

A. Federal Agencies:

Letter 1. U.S. Fish and Wildlife Service, Richard A. Hoppe, Field Supervisor, Ecological Services, Albuquerque, New Mexico.

EIS Document adequately describes fish and wildlife resources; concur that new wastewater facilities are needed; EIS should clarify statement that permit requirements could be "substantially reduced"; expressed concern that continued use of chlorine for disinfection will adversly affect fisheries; recommended consideration of 3 alternative disinfection methods.

Letter 2. Department of Housing and Urban Development, Fort Worth Regional Office, Victor J. Hancock, Environmental Clearance Officer, Fort Worth, Texas.

EIS should include schedule for construction of the system to show when hookups would be possible; Flood Insurance Rate Map became effective January 12, 1982; should consider treatment facility with varying load capacities in case projected population or distribution is not realized; HUD is reviewing High Range development proposal; Dallas Office is preparing EIS for High Range Subdivision and environmental assessments are being done for additional, smaller proposed developments; HUD does not oppose the proposed action.

Letter 3. Federal Emergency Management Agency, Cheryl Hoke, Emergency Management Specialist, Denton, Texas.

The final (January, 1982) Flood Insurance Rate Map boundaries vary slightly from the earlier Flood Hazard Boundary Map presented in the Draft EIS; sewer lines located in flood plains should be designed to avoid inflow of or discharge to flood waters; the plan should not encourage development in flood plains.

Letter 4. U.S. Soil Conservation Service, Ray T. Margo, Jr., State Conservationist, Albuquerque, New Mexico.

No Comment.

TABLE II-1. Continued.

B. New Mexico State Agencies:

Letter 5. Agriculture Department, Governer's Cabinet, William Stephens, Secretary, Las Cruces, New Mexico.

An adequate EIS but the recommendation for a new and improved plant should be reviewed; there is a possibility that effluent discharged to the river may jeopardize crops; if a new plant is constructed, it should be able to assure citizens that Water Quality Control Commission standards will be met; water rights issues were not addressed; the relationship between wastewater flows and return credit should be clarified with the State Engineer; since the present plant is not operated properly, sound procedures in the administration and mangement of the facility need to be implemented before the plant will be able to meet standards.

Letter 6. Environmental Improvement Division, Martin S. Castillo, Environmental Review Coordinator; Santa Fe, New Mexico.

3 reviewers at EID supported the proposed action; 1 reviewer supported the proposed action with comments: the Draft EIS did not adequately assess need for proper maintenance and operation of the facility or the importance of a well structured and enforced Industrial Waste Ordinance; asked if the new construction could treat the entire 4.6 mgd by itself until flows exceeded 4.6 mgd when the activated sludge portion could be added in.

Letter 7. Water Resources Division, D.E. Gray, Chief Water Rights Bureau, Santa Fe, New Mexico.

Did not agree with certain points of water rights discussion; based on Draft EIS, land required for water rights in 2005 would equal 777 acres rather than 1000 acres; state permit is not generally required for trench dewatering.

Letter 8. State Planning Division (A-95 Clearinghouse), Santa Fe, New Mexico.

Comments were received after closing date; raised no substantive issues and supported project. Repeated attempts by EPA to obtain letter from State Historic Preservation Officer were not successful as of February, 1983.

C. Local Governments:

Letter 9. City of Las Cruces, David M. Steinborn, Mayor.

Requested EPA meet a specific schedule to assure the most complete funding of the proposed action.

Letter 10. Southern Rio Grande Council of Governments, Albert T. Sanchez, Executive Director, Las Cruces, New Mexico.

Concurs with facilities plan and supports funding.

3. PUBLIC REVIEW

Letter 11. Anne Kapp, Las Cruces, New Mexico.

Discussion of connection fees appears to be incorrect; land use maps contain errors and do not conform with city documents; recommended clarification and revision of Draft EIS Figure 6-13, and Tables 6-12 and 6-14.

Letter 12. David Bollschweiler and Klaus Wittern, Las Cruces, New Mexico.

Recommended consideration of rapid infiltration alternative (see text).

Letter 13. Richard McCowen, Mesilla, New Mexico.

The lift station in Mesilla should be moved or eliminated; the alternative of a second plant located near Mesilla was not seriously considered; the City of Las Cruces decided before the planning process began what they wanted and would not consider other alternatives; there are waste lands south of Las Cruces that would be suitable for a second plant without jeopardizing agricultural lands.

comments in the following text. Appendix A provides a responsiveness summary for issues raised at the Public Hearing. Appendix B presents the full text of all letters received on the Draft EIS and the response to the issues raised.

C. RESPONSES TO COMMENTS

For all comments which presented substantive disagreements or questions about the content of the Draft EIS, EPA developed a written response. All comments are presented together with their response in the appendicies. Most comments addressed specific issues, however, there were five general issues which were of particular interest to the public: request for further consideration of the rapid infiltration alternative; the effectiveness of the public participation program; the accuracy of the land use maps; operation and maintenance; and project funding and scheduling. These issues are discussed below. Part III of the Final EIS contains revised versions of three maps in the Draft EIS which were modified in response to comments received. Minor editorial changes are noted in a list of Errata beginning on p. III-1.

ISSUE 1. RAPID INFILTRATION. The comment which stimulated the greatest public interest and concern was a proposal to assess rapid infiltration as an alternative. Letter 12 indicated that rapid infiltration for effluent treatment and disposal, coupled with sludge incineration, is an economically feasible alternative to the construction of a large, new conventional treatment facility. The City Commission, as well as others, thought that this alternative should be considered and reviewed for possible adoption in place of the proposed action.

Response to Issue 1. A detailed response was prepared by the facilities plan and EIS consultants and presented to the City of Las Cruces. This response is presented in Appendix B, following letter 12. The following major points are contained in that response.

a. The proposal as outlined in letter 12 underestimates dollar costs by at least $6.5 million (with only three of six cost items considered).

b. Sludge incineration has not been found to be cost-effective elsewhere, and there are no special conditions in Las Cruces which are conducive to this approach.

c. Rapid infiltration would cause water losses probably amounting to 20% of the total flow volume and would result in degradation of water quality, possibly in violation of New Mexico's ground-water regulations. These represent significant, adverse environmental impacts which conflict with objectives identified during the public participation process.

d. A rapid infiltration project would raise complex water-rights issues. There would be some and possibly a large increase in the water rights needed by the City, which would increase dollar costs and would

severely impact irrigated land in the Mesilla Valley. (See EPA, 1977b, section 3.4.1 for a detailed discussion of this type of impact, which adds to dollar costs and is totally counter to the objective of protecting prime agricultural land.) Even if the City did not need water rights, a rapid infiltration project would aggravate existing water shortage problems which are a major economic and environmental concern in the region.

This issue was reviewed by the City Commission, which voted to support the facilities plan as proposed.

ISSUE 2. PUBLIC PARTICIPATION PROGRAM. Several speakers at the Public Hearing commented that the public participation process was ineffective because the process discouraged public input and because due consideration was not given to dissenting opinions.

Response to Issue 2. The Chairperson of the CAC, Dr. Jane Allen, has provided an evaluation of EPA's public participation program for the Las Cruces EIS. This is presented in Appendix C. Briefly, she felt that information was readily available and that there was ample opportunity for public input although the process was time consuming. Dissenting opinions were evaluated during the preparation of the environmental impact statement and facilities plan. These issues and how they were resolved are summarized in Table 7-1 of the Draft EIS.

ISSUE 3. LAND USE. The CAC expressed their concern that the land use maps, Draft EIS Figures 6-11 and 6-14, contained significant errors and were therefore unacceptable.

Response to Issue 3. Most of the specific comments concerned small changes in land usage which occurred after the maps were prepared, or to small areas of publically used lands (cemetaries etc.) which were not shown due to scale; also, there were some unintentional errors not related to scale or timing. The errors and omissions have no effect on the conclusions reached in the EIS. All evaluations of population and sewage flow were based on data on existing population distribution, proposed developments, growth trends and zoning densities. The results of this analysis are presented in Draft EIS Table 6-13 and shown on Figure 6-13. The land use maps were prepared subsequently as an illustration of the pattern of land uses and were not intended to have the detail of a comprehensive plan or zoning map. In order to rectify concerns on this point, the maps have been revised to correct errors, to show more detail, and to reflect changes through mid-1983. EPA policy discourages the printing of color maps, unless essential; thus the revised maps are on file with the Director of Public Utilities, City of Las Cruces.

ISSUE 4. OPERATION AND MAINTENANCE. Concern was expressed by public and government representatives who felt that the current plant is not properly operated and maintained, that improvement of O&M might result in the current plant meeting NPDES standards, and that a new plant might fail to meet standards due to poor operation and maintenance practices.

Response to Issue 4. Two seperate O&M evaluations have been conducted at the Las Cruces plant: "City of Las Cruces Plant Evaluation Report for Wastewater Treatment Facility", Molzen-Corbin and Associates, March 1982; and "POTW Inspection Report, Las Cruces, NM", JRB Associates, July 1982. The reports identify several problems with the design and physical condition of the plant. Unless these physical limitations are corrected, changes in O&M procedures would not enable the plant to meet permit standards at current flows. It is not considered cost effective to make all necessary changes to the existing plant since a larger capacity plant is needed. Some modifications to the plant will be made, however, which will enable it to meet Interim standards which will be in effect until the new plant is completed. See, for example, discussions in Section D, below.

Personnel qualifications, training, and performance were found to be adequate and to meet all certification requirements. The evaluations did identify aspects of O&M procedures which should be improved and which would result in better plant performance. Changes will be adopted in procedures to improve the current plant's performance. Prior to start up of the new plant, O&M procedures specific to the plant will be developed and plant personnel will attend a training course on the O&M of the new plant. These measures together with a larger, well designed treatment plant will enable Las Cruces to meet its permit standards.

ISSUE 5. PROJECT FUNDING AND SCHEDULE. A number of comments were concerned about the timing of project construction, and also about the availability and amounts of public funding.

Response to Issue 5. As of February 1, 1983, the schedule for project design and construction was as set forth below. Except as noted, the City intends to seek and believes it has a good chance of receiving EPA funding of 75 percent of all eligible expenditures, plus an additional 12.5 percent funding from the State of New Mexico.

Interim action: implementation of sludge disposal alternative (see subsequent discussion in Section D). Project costs are approximately $600,000. To be on-line by summer, 1983.

Segment 1: construct roughing filter portion of treatment plant and about half of other facilities (except for activated sludge units). Design to be completed by June, 1983; funding expected in October, 1983; construction to start in early 1984; construction to be completed in mid-1985. Cost is approximately one-third of the $30 million total capital outlay for the entire preferred alternative.

Segment 2: construct remaining plant facilities, including activated sludge units (if still required by EPA regulations). Design to begin in July, 1983; all other dates are one year later than for segment 1. Cost is approximately one-third of the $30 million total capital outlay for the entire preferred alternative.

Segment 3: construct major interceptors; renovations to lift stations. All target dates are one year later than for segment 2. Cost is approximately one-third of the $30 million total capital outlay for the entire preferred alternative. Little of segment 3 is considered likely to be eligible for EPA funding.

D. OTHER EVENTS SUBSEQUENT TO RELEASE OF DRAFT EIS

In addition to normal technical issues, EPA's review of the facilities plan identified special concerns as to the conclusion of the plan that the existing plant has an effective capacity of only 2.9 MGD, and that the proposed expansion to 8.9 MGD represents an addition of 6.0 MGD of capacity. (See discussion on page 4-1 of the Draft EIS.) In particular, EPA questioned whether or not previous committments of federal funds for treatment plant improvements, in 1975, had resulted in a facility with a 5.0 MGD capacity, in which case only 3.9 MGD of the expansion would be elibible for additional funding.

In response to these concerns, the City provided documents demonstrating that the previous EPA funding had been directed toward short-term improvements and was not intended to solve the long-term problems of the community. In particular, many elements of the 5.0 MGD plant were over 30 years old at the time of the 1975 grant and thus cannot have been expected to function for an additional 20 years. In further response to the EPA review, the facilities plan was revised to include an analysis of an additional alternative. This alternative would involve remedial work to the existing plant, so that it would in fact be able to handle 5.0 MGD; and additional work to expand the capacity to 8.9 MGD. The alternative was found to have a present-worth cost of $19,880,000, which is significantly higher than the $17,867,000 cost of the City's preferred action; the alternative also was considered to pose significant potential reliability problems. EPA has accepted these conclusions. (Note that these comparisons are in terms of present-worth, whereas cost data presented on pages I-8 and IV-2 represent actual capital construction costs. Also, the above costs are for wastewater facilities only, and exclude sludge management.)

The time spent in the EPA review and the City response contributed to the 1-year lag between the filing of the Draft and Final Environmental Impact Statements. During that year, several other events took place which led to changes in the facilities plan. Changes of significance to the EIS are discussed below.

BLM Lands. Page 5-2 of the Draft EIS notes the potential that certain lands east of the City, controlled by the U.S. Bureau of Land Management, would eventually be released and would become available for urban development. Subsequent to completion of the Draft, these lands were exchanged to the City of Albuquerque as part of a land swap which provided the U.S. Forest Service with a parcel of land to be added to the Sandia wilderness. Albuquerque and Las Cruces have discussed ways in which the land

would be made available for private development, and while no decisions have been made, it seems likely that such development will occur prior to 2005. This reinforces the facility plan recommendation to size new interceptors in order to accommodate growth on these lands.

Assurance of Discontinuance. Effective August 16th, 1982, the City of Las Cruces and the New Mexico Water Quality Control Commission entered into an Assurance of Discontinuance by which the City commits to a schedule which will lead to compliance with NPDES requirements. By no later than July 29, 1983, effluent may be discharged only if it contains 50 mg/l or less bio-chemical oxygen demand (BOD_5) and 1000/100 ml or less fecal coliform bacteria. For flows of 5.75 MGD or less, more stringent limits are to apply by no later than January 30, 1984. For example, when the daily average effluent flow is 5.0 MGD or less, the 24-hour composite BOD_5 must be 30 mg/l or less and the daily fecal coliform bacteria count must be 500/100 ml or less.

Sludge Management. The facilities plan concluded that the single most severe problem at the existing plant relates to inadequate sludge handling facilities; the same conclusion was reached in the O&M review prepared by JRB Associates. As part of its efforts to comply with the Assurance of Discontinuance, the City intends to begin implementation of its preferred sludge disposal alternative by summer 1983. This implementation will help improve conditions at the existing plant, and also represents the first step in the long-term expansion of facilities. Implementation will involve acquisition of, and improvements to, a controlled-access site on the West Mesa, and purchase/operation of trucks and a spreader.

The City has applied for EPA participation in the funding of this action. Funds would be provided through extension of an existing grant, C-351026, which dates from February 1979. The original grant request involved funds for sludge handling facilities, but the necessary items were deleted prior to grant approval. EID supports the City's application to reinstate the funds, and the matter is now under review by EPA. EPA is considering approval of the request, since funding would be in accordance with the cost-effectiveness analysis presented in the approved facilities plan.

The site originally selected for sludge disposal (see Figure 5-4 on p. 5-32 of the Draft EIS) was chosen in large part because it is west of a major fault which separates areas of good ground water (to the east) from areas of poor ground water (to the west); see for example data in King et al.(1971) and Wilson et al. (1981). In the summer of 1982, the City drilled two water supply wells in area 3 to 4 miles east of the original site. The western well was a dry hole; field data indicate that the wells are separated by a major fault, which is inferred to be the same structure identified in the previous reports. Based on the improved knowledge about the location of this fault, it appears that sludge disposal could occur eastward of the originally proposed site, without posing any threat to ground water.

Consequently, the City is now considering the use of an approximately 150-acre sludge disposal site located in the southeast quarter of Section 25,

Township 23S, Range 1W. This new site, which contains the dry hole, is almost exactly 3.5 miles east of the previously proposed site, and is directly southwest of the Jackrabbit Interchange on Interstate-25 (see Figure 5-4 of the Draft EIS). Geologic conditions, as defined by lithologic and geophysical logs of the dry hole, indicate that there is little potential for sludge water to reach the water table, because more than half of the sediments in the 312 feet between the land surface and the water table consist of material with a very low permeability. Pursuant to State regulations, the City has obtained an approved ground-water discharge plan which allows for sludge disposal at the site. The plan requires that a monitoring well be constructed down-gradient (southeast) from the disposal site. The well, which will be constructed in the southeast corner of the site, will be analyzed annually for nitrates, total dissolved solids and chlorides.

The other environmental characteristics of the new site (including original ownership, vegetation, soils, land use) are similar to those described for the old site, and environmental impacts of sludge disposal on the site would be essentially the same. (See Draft EIS pages 5-33, 6-6, 6-21, 6-28, 6-36, 6-41, 6-46, 6-69, and 6-73.) The major difference would be that the new site is 7 round-trip miles closer to the treatment plant than the previously proposed site; it is also 400 feet lower in elevation. Consequently, the travel time and energy use for truck transport to the new site would be substantially less than for the old site. Dollar costs related to sludge disposal would decrease by as much as $20,000 per year. An archaeological survey of the site has recently been completed by the Cultural Resources Management Division of the Department of Sociology and Anthropology at New Mexico State University. Preliminary results indicate no significant resources; a copy of the survey will be submitted with the grant application.

A value engineering study of the proposed facilities was conducted by Arthur Beard Engineers, Inc. (draft report dated December 1982). One recommendation was to consider the alternative of piping sludge to the disposal site, rather than using truck transport. An evaluation of this concept was performed by the City's engineering consultant, and the alternative was not found to be cost-effective.

Part III

Modifications and Corrections to the Draft EIS

PART III. MODIFICATIONS AND CORRECTIONS TO THE DRAFT EIS

Part III of the Final EIS contains revisions made to the Draft EIS based on errors and omissions identified through the public review process, or resulting from internal review by EPA and the EIS consultant. Minor changes are incorporated into a list of errata, Section A. To correct deficiencies in land use maps, three maps have been revised; see Section B. Changes related to revisions in the facilities plan are not provided in Part III, but are presented in Section D of Part II. In addition, all of Chapter 1 (Summary) of the Draft EIS has been replaced by Part I of this Final EIS.

A. ERRATA

The following changes in the Draft EIS are of an editorial nature, and are relatively minor. Consequently, the affected pages have not been reprinted in full. These changes are to be incorporated into the Draft EIS. In each case the errata identifies the page, paragraph and sentence which has been revised, and then discusses the changes which should be made to correct the Draft EIS. New or modified material is underlined. References to Paragraph 1 etc. indicate the first full paragraph on a page. If no paragraph is cited, the lines containing the changes will be found in the first partial paragraph on the page.

Page 5-4, paragraph 3, line 6. Reword the sentence to replace the phrase extremely rapid with the word high.

Page 5-42, paragraph 2, line 3. At the end of the paragraph add the following sentence: "Under current levels of federal and state assistance, the fee would be $12.20 per month which is less than one percent of the service area's median household income."

Page 5-42, paragraph 5, line 2. Reword the paragraph beginning with line 2, as follows: "If the city decided to raise the connection fee, this would shift a larger share of the cost of a new plant and interceptors to the new users. For example, one-fourth of the annual debt service payment could be obtained by raising connection fees to $150 under current levels of state and federal financing assistance or to $1000 if the project is entirely financed by local funds."

Page 6-6, paragraph 5, line 3. Change 5.3.2 to 5.2.3.

Page 6-16, paragraph 2, line 3. Reword the last half of the sentence to read: "... the Federal Emergency Management Agency released a final map of flood rate insurance zones which became effective January 12, 1982."

Page 6-16, paragraph 3, line 5. Change the figure 1000 to 100.

Page 6-24, paragraph 1. Revise the paragraph to read as follows: "..., Las Cruces has 17,040 AFY of diversion water rights. Projections of future water requirments made by the State Engineer assume that 50 percent of this diversion will be discharged back to the Rio Grande (ISC 1975, p. 57). Such a committment of return flow is part of the permit requirements in other cities such as Albuquerque. However, the extent to which municipal return flows are obligated to continue has not been litigated in New Mexico, and, thus, it is not an absolute certainty that, should the City discontinue its return flow, it would have to replace this supply by obtaining other rights."

Page 6-24, paragraph 2, line 2. Delete the words continues to so that the sentence reads: "Assuming that the City gets a 50 percent credit for its wastewater discharge,..."

Page 6-24, paragraph 2, line 5. Reword this sentence to read as follows: "Since farmland has a consumptive irrigation requirement of 1.93 acre-feet per acre, the City will need to obtain and retire 777 acres for irrigation water rights by the year 2005."

Page 6-25, paragraph 4. Delete the last sentence and add the sentence: "A permit is not required from the State Engineer for dewatering excavated trenches provided that water is discharged to a storm sewer, drain, canal or water course and none of the pumped water is placed to a beneficial use."

Page 6-27, paragraph 6, line 1. Change 6.6.4 to 6.6.2.

Page 7-3, paragraph 3, line 4. Rephrase the last part of the sentence to read as follows: "... and the effect of increased growth on land use."

Bibliography, ISC, 1975a. Delete this reference.

Bibliography, (ISC) 1975b. Change _____, 1975b to read ISC, 1975.

B. PAGE REVISIONS

Figures 6-11, 6-13 and 6-14 of the Draft EIS have been modified in response to comments received. Copies of the revised maps are on file at the Utilities Department, City of Las Cruces. Although the revised maps are more detailed than those in the Draft EIS, the scale does not permit the mapping of the use of every individual parcel of land in the planning area. Also, changes in land use which post-date mid-summer 1982 are not included.

Part IV

Preferred Alternatives

PART IV. PREFERRED ALTERNATIVES

A. POSITION OF THE CITY AND CAC

The City of Las Cruces has selected the alternative which was recommended by the facilities plan engineer, endorsed by the Citizens Advisory Committee, and adopted by the Steering Committee of the Joint Powers. This alternative calls for extensive interceptor construction with some lift station and collection system improvements. Proposed interceptors would provide capacity for 40 years of development to the north and/or east; no additional capacity is proposed for areas south or west of Las Cruces. A new treatment plant (with some use of existing facilities) would be built adjacent to the existing plant. The treatment process would include a roughing filter followed by abbreviated activated sludge and chlorination. This facility would be capable of treating 8.9 mgd of effluent in compliance with NPDES permit requirements. Effluent would be discharged to the Rio Grande as at present. Wet sludge would be trucked to the west mesa and disposed of by injection on a controlled-access site. Further information on the alternative is provided in Appendix B of the Draft EIS. The cost of the proposed facilities is as follows:

interceptors and related improvements	$10,107,000
treatment works and sludge management	$21,788,000
TOTAL COST	$31,895,000

Note that this cost is exclusive of the expense of constructing collection systems in areas of new development. The potential savings associated with a closer sludge disposal site are not included (see Part II, Section D).

The preferred alternative is viewed by the Applicant as being: 1) the most adaptable in the face of changing federal regulations for effluent and sludge disposal; 2) the most flexible in terms of construction and operation especially for near-term solution of NPDES compliance problems; and 3) comparatively inexpensive in total dollars (the preferred alternative is less than one percent more costly than the lowest cost alternative).

The New Mexico Environmental Improvement Division has indicated support for the proposed facilities and will evaluate funding alternatives at such time as a formal grant application is submitted.

B. PREFERRED EPA DECISION

The U.S. Environmental Protection Agency has reviewed and approved the facilities plan of the City of Las Cruces. This approval means that the agency concurs with conclusions in the plan regarding the most cost-effective alternatives. For example, EPA concurs that a roughing filter and activated sludge facility is the preferred treatment system. EPA's own alternatives

relate to funding of wastewater facilities in Las Cruces. Based on a thorough review of the plan, the analysis of the Draft EIS, and written and oral comments received on the Draft EIS, EPA prefers the alternative of funding construction of eligible portions of the treatment works proposed by the City of Las Cruces. That is, subject to considerations such as priority and availability of funds, EPA would approve funding requests for eligible portions of the facilities described in Section A above.

Any construction grant would be conditioned to require that if buried cultural resources are encountered during construction, work must cease in that area and the City must provide notification of the discovery to EPA, the State Historic Preservation Officer, and the Departmental Consulting Archaeologist, Interagency Archaeological Services, U.S. Department of Interior. EPA will then proceed in accordance with the regulations of the Advisory Council on Historic Preservation (36 CFR, Part 800), prior to any action taken which would affect the resource.

EPA will review this proposed decision in the light of comments received on the Final EIS, and will announce its final decision in a Record of Decision to be issued after the closing period for EIS comments.

Appendix A

APPENDIX A. RESPONSIVENESS SUMMARY FOR PUBLIC HEARING

The Public Hearing for the Las Cruces wastewater treatment facilities plan and Environmental Impact Statement was held at the Las Cruces City Hall March 29, 1982. Seven persons spoke at the Public Hearing, excluding government officials and consultants involved in preparation of the EIS. This appendix identifies the issues that were raised at the Public Hearing which require response. The response is provided with the comment, except for issues which were also raised in the letters presented in Appendix B. Since written comments generally provided more detail on the question raised, responses to issues which were raised both at the Public Hearing and in letter form are provided with the letter, in Appendix B. In the discussion below, the person who raised the issue is identified in parenthesis at the end of the issue statement. A summary of all comments received at the Public Hearing is presented in Table II-1.

Part III of this Final EIS contains all pages of the Draft EIS which have been corrected or modified in response to comments. Where changes are of a minor, editorial nature, the complete pages which would be changed are not included in Part III. Rather, the editorial changes are noted in a list of errata beginning on p. III-1.

Issue 1. The existing and future land use maps have numerous and significant inaccuracies (Dr. Jane Allen for the CAC, Jim White, Anne Kapp).

Response to Issue 1. See response to issue 3 in Part II and the response to letter 11, items 11-3 and 11-4, in Appendix B.

Issue 2. On Draft EIS p. 5-42, the paragraph on connection fees appears to make the statement that an increase in connection fees would result in new users paying for the entire system (Jim White).

Response to Issue 2. Raising connection fees would result in new users paying a larger share of the cost for service; how much would depend on the amount raised through increased connection fees. Many communities have elected to charge more for connections since most of the increased capacity and the new interceptor lines are needed to provide service to new users. They feel the cost for expanded service should not be borne equally by the existing residents who do not present a demand for the service. In other communities however, particularly those trying to attract new development, this option is not attractive. The discussion on p. 5-42 has been revised to make the intent clearer, see Errata, Part III of this Final EIS.

Issue 3. The cost of new facilities should not be charged to new users (Jim White).

Response to Issue 3. The selection of a system of user charges is under consideration by the City.

Issue 4. With reference to the paragraph on connection fees on Draft EIS p. 5-42, it would take 5,330 connections per year to generate $800,000 income. This figure seems too high (Jim White, Anne Kapp).

Response to Issue 4. The statement on Draft EIS p. 5-42 is incorrect. The text has been revised, see Errata, Part III of the Final EIS.

Issue 5. Did EPA select Lee Wilson and Associates as the consultants (Jim White)?

Response to Issue 5. Yes, they were recommended by the City and selected by EPA.

Issue 6. Does the mapping and planning done for the EIS constitute a land use plan for Las Cruces (Jim White)?

Response to Issue 6. See discussion on Draft EIS p. 6-59. The mapping and planning done for the EIS does not dictate individual site uses, the placement of schools, etc., but it would encourage the pattern of growth to occur as shown. As of early 1982, the City is developing a comprehensive plan which will become the land use plan for the area. The data in the EIS were developed with the assistance of the local planners and have been reviewed by them. Maps being prepared in the comprehensive planning effort should not differ substantially, in terms of growth patterns, from the one presented in the EIS. Also see response 11-4 in Appendix B.

Issue 7. The City of Las Cruces selected their preferred treatment option before forming the Citizen's Advisory Committee (Richard McCowan).

Response to Issue 7. The decision was not made prior to the formation of the Citizens Advisory Committee. Several options were considered during the planning process, see the discussion in Draft EIS section 5.3 and in the facilities plan, Part III-D. The selected alternative did not correspond to preliminary suggestions made by the City.

Issue 8. The public participation process was an "exercise in futility" and any dissent from the public wasn't heard (Richard McCowan).

Response to Issue 8. Issues raised by the public were addressed at the public meetings and in the analysis of the facilities plan, see Draft EIS section 7.2 and Table 7-1 for a review of these issues and their resolution. Also refer to Appendix C for an evaluation of the public participation process.

Issue 9. The CAC voted to study auxillary locations to the proposed plant site but was overturned by the Joint Powers Steering Committee.

Response to Issue 9. The Joint Powers Steering Committee considered this recommendation but decided not to pursue it due to the cost.

Issue 10. Two sites are available near Mesilla for a second plant. The land at both sites is unproductive and its loss would not affect the availability of agricultural land (Richard McCowan).

Response to Issue 10. See response 13-3 in Appendix B.

Issue 11. The Mesilla lift station is the source of undesirable odors, is located in close proximity to a residence, and should be moved (Richard McCowan).

Response to Issue 11. See responses 13-1 and 13-2 in Appendix B.

Issue 12. The construction of a new prison west of Mesilla might impact the population projection (Richard McCowan).

Response to Issue 12. The prison will be served by an independent, on-site facility, and will therefore not contribute to flows at the plant. Population growth in the valley stimulated by the prison is accounted for as part of the growth related to new industry and is incorporated into the projection.

Issue 13. Solving the problem of the sewer line on Mesquite will only cost $4,000 (Draft EIS Table 5-2) and should be done as soon as possible rather than wait for the grant (Anne Kapp).

Response to Issue 13. The City is proceeding to correct this problem which is included in the maintenance budget for 1982-1983.

Issue 14. Draft EIS Table 6-14 on p. 6-67 should indicate who invested the money and when they plan to begin and complete the project (Anne Kapp).

Response to Issue 14. See response 11-6 in Appendix B.

Issue 15. Please give more information and verify the housing figure of $634,666 presented in Draft EIS Table 6-12 on p. 6-57 (Anne Kapp).

Response to Issue 15. See response 11-7 in Appendix B.

Issue 16. Give more identifiers on Draft EIS Figure 6-13, p. 6-62, to make it easier to pinpoint locations (Anne Kapp).

Response to Issue 16. The map has been revised and is on file at the Utilities Department, City of Las Cruces.

Issue 17. Not enough people attended the public hearing. The public participation process discourages people from coming (Klaus Wittern).

Response to Issue 17. With regard to the number of people who attended, notification of the Public Hearing was provided 45 days in advance of the meeting, so that interested people could arrange to come. As it turned

out several other major events in town were concurrent with this meeting, most notably the Shuttle Landing at White Sands. For a discussion of the public participation process, see the response to issue 2 in Part II of this Final EIS.

Issue 18. Is it wise to select the design engineer before facility plan approval (Klaus Wittern)?

Response to Issue 18. This is a decision of the City and reflects a need for prompt action to resolve existing problems at the facility. There is no conflict with EPA regulations.

Issue 19. Since Las Cruces has been designated an SMSA the population projection is too low. Las Cruces will experience substantial growth and to under-estimate the growth is a serious professional error (Klaus Wittern).

Response to Issue 19. This issue is addressed on Draft EIS p. 5-6 and in section 6.6.2. As discussed at an earlier public meeting, there is a tendency for new SMSA's to be growing faster than older ones, but this is due to the characteristics which made them qualify as an SMSA. The designation of an area as an SMSA has a negligible effect on its subsequent growth rate. The projected growth rate is high - an average of 3 percent per year. The higher projections for Las Cruces cited at the public meetings were based on growth rates anticipated during the 1970's. The 1980 census revealed that growth rates were lower than anticipated. Based on these findings, regional models of birth rates and other population growth components, and projected economic development trends, projections for the area have been revised resulting in a somewhat lower growth rate than projected earlier. The revised projections are a reasonable forecast for the Las Cruces area. In any case, the total population figure was evaluated by the New Mexico Environmental Improvement Division and cannot be changed arbitrarily, but only upon conclusive evidence of more rapid growth. Such evidence is not available.

Issue 20. The land application alternative should have been given more consideration (Klaus Wittern).

Response to Issue 20. See the response to letter 12 in Appendix B.

Issue 21. The City has said that they would be required to compensate for the loss of water if they injected water into a west mesa site. It doesn't make sense that the City would be charged for a consumptive use of water by putting it into the ground, when you lose 50 percent of the water from evaporation by putting it into a stream (Klaus Wittern).

Response to Issue 21. See the response to letter 12 in Appendix B.

Issue 22. The total cost of the treatment plant - $31.9 million - is based on an annual inflation rate of approximately 3 percent which is unrealistic. If you used more realistic figures e.g. 8 percent, the cost would be $36 million;

10 percent, it would be $38.7 million; and 12 percent, it would be $41.2 million. An attempt should be made to be more realistic (Klaus Wittern).

Response to Issue 22. The estimated project costs are as follows (abstracted from pages 329-331 of the facilities plan):

Treatment Plant	$ 18,946,000
Interceptors and Lift Stations	8,766,000
Easements	20,000
Line Renovations (rounded)	5,000
Subtotal	$ 27,737,000
Inflation (15%, rounded)	4,158,000
Total	$ 31,895,000

The pre-inflation figures are current with the facilities plan. The schedule on page 328 indicates that 15 percent inflation has been allowed to account for the fact that construction bids would take place over a 3-year period. Certainly, the actual date of construction and future inflation rates are not firm. Inflation allowances and hence estimated total costs, can be generated for a variety of conditions and could be larger (or lower) than those shown in the plan.

Issue 23. City officials who look at a document are not aware of 1) the public's concerns when they're not included in the document or 2) how they were resolved (Ron Hudson).

Response to Issue 23. All comments raised by the public during the review of the Draft EIS are presented in this Final EIS along with their response. Questions raised during the preparation of the EIS are summarized on page II-2 of the Final EIS and in Draft EIS Table 7-1, which includes information on how the issue was resolved. More detail on these issues can be obtained through review of the minutes of the CAC and Steering Committee meetings available from the city's Public Participation Coordinator.

Appendix B

APPENDIX B. COMMENT LETTERS AND RESPONSES

Appendix B of this Final EIS reproduces all letters received. Comments which require response are keyed to the control number of the letter in which they appear (for example, comment 2-3 is the third comment in letter No. 2). The numbered response to specific comments adjoin the appropriate comment letter. In some cases, responses go beyond the scope of the specific comment, in order to adequately cover other related comments and to optimize the cross-referencing of responses.

Part III of this Final EIS contains all pages of the Draft EIS which have been corrected or modified in response to comments. Where changes are of a minor, editorial nature, the complete pages which would be changed are not included in Part III. Rather, the editorial changes are noted in a list of errata beginning on page III-1.

1

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Field Supervisor
Ecological Services, USFWS
Suite C, 3530 Pan American Highway, NE
Albuquerque, New Mexico 87107
March 25, 1982

RECEIVED
APR. 1 1982
6 ES

Mr. Clinton B. Spotts
Regional EIS Coordinator
Environmental Protection Agency
Region 6
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

We have reviewed the Draft EIS and Facilities Plan for Wastewater Treatment Facilities at Las Cruces, New Mexico. The documents adequately describe fish and wildlife resources in the project area and address major impacts of plant construction and operation. We concur that new wastewater facilities are needed to improve the quality of effluent with respect to B.O.D. and suspended solids and to achieve existing limitations under a National Pollutant Discharge Elimination System (NPDES) permit.

1-1 However, the Facilities Plan implies on Page 242, paragraph 1, that permit requirements could be "substantially reduced." This statement requires further clarification, as we are unaware of any administrative action which will degrade water quality in the receiving stream. Although the impact of sewage effluent on the Rio Grande is minimal during the spring and summer irrigation seasons, stream flows below the outfall in winter may consist entirely of effluent. Therefore, the quality of that effluent will have a significant effect on aquatic biota. For this reason, we are concerned that the continued use of chlorine for disinfection will adversely affect fisheries below the outfall. Residual chlorine is highly toxic to certain aquatic organisms and can produce chloramines, trichloromethanes, and other by-products whose impact on the food chain requires further study. Therefore, we

1-2 recommend that alternatives be considered to disinfect sewage effluents. These should include the following:

1. Periodic rather than continuous disinfection using chlorine.
2. Chlorine disinfection followed by dechlorination with sulfur dioxide.
3. Ozone disinfection.

1-1 This issue is discussed on Draft EIS p. 5-25 and 5-26.

1-2 Impacts on aquatic organisms in the Rio Grande from chlorine residuals in Las Cruces effluent would not be considered significant for two reasons.

1) The river below Las Cruces supports neither a large nor diverse aquatic population (due to the intermittent nature of the stream and the high turbidity and salinity).

2) Dilution with river water would reduce chlorine residual concentrations below toxic levels, except during low flows when the total flow would be from sewage discharge. While the chlorinated effluent might have some toxic effects during such periods, without the Las Cruces discharge there would be no flow and no aquatic habitat whatsoever.

1

Because water reuse occurs on a seasonal basis, it may not be necessary to disinfect the effluent during the winter (non-irrigation) season when chlorine would have the greatest adverse impact on stream life. However, if public health is jeopardized by this action, another alternative should be selected.

Dechlorination can remove a substantial portion of the chlorine required for disinfection. A number of dechlorination procedures are effective and inexpensive, including sulfur dioxide, to remove chlorine from sewage effluents.

1-2 (cont.)

Ozone is probably the most environmentally acceptable means of disinfection. It is effective against both bacterial and viral organisms, and it significantly improves water quality by flocculating heavy metal colloids, reducing coloration, turbidity and B.O.D. and increasing oxygen saturation in the effluent. It has been selected for use elsewhere in New Mexico where significant coldwater fisheries exist in the receiving stream. However, because of its relatively high cost to produce, it has not gained wide public acceptance.

These alternatives should be thoroughly evaluated in the Final EIS and Facilities Plan. We recommend that one of these alternatives be selected for use at Las Cruces to insure that aquatic and human resources are protected from the insidious effects of chlorine residues.

This opportunity to comment is appreciated.

Sincerely yours,

R.A. Hoppe

Richard A. Hoppe

cc:
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Director, New Mexico Department of Health and Environment, Environmental Improvement Division, Santa Fe, New Mexico
Holzen-Corbin and Associates, Albuquerque, New Mexico
Regional Director, FWS, AEV, Albuquerque, New Mexico
Area Manager, U.S. Fish and Wildlife Service, Phoenix, Arizona

Periodic disinfection would not allow compliance with the NPDES permit and would pose a health threat. It also might have greater adverse impacts on aquatic life than continuous chlorination. Fish tend to avoid areas that continuously have high chlorine residuals. Intermittent chlorination might impact organisms that otherwise would have avoided the area.

Compared to simple chlorination, chlorination/dechlorination would have somewhat higher capital costs and would cost nearly twice as much to operate. Capital costs for ozonation would be about three times as much, and operation costs would be two or three times higher than for chlorination. For a high-mountain stream that supports an economically and recreationally important trout fishery, the extra expense of ozone is justified (trout are very sensitive to chlorine, compared to other fish species). In the case of Las Cruces, the aquatic habitat of the lower Rio Grande is not considered of such value that the extra cost of dechlorination or ozonation would be offset by any significant benefits.

2

REGION VI

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FORT WORTH REGIONAL OFFICE
221 WEST LANCASTER AVENUE
P.O. BOX 2905
FORT WORTH, TEXAS 76113

RECEIVED
APR 8 1982
6 ES

IN REPLY REFER TO:

April 7, 1982

Mr. Clinton B. Spotts
Regional EIS Coordinator
Environmental Protection Agency
Region 6
1201 Elm Street
Dallas, TX 75270

Dear Mr. Spotts:

The Draft Environmental Impact Statement for Wastewater Treatment Facilities at Las Cruces, New Mexico, has been reviewed in the Department of Housing and Urban Department's Dallas Area Office and Fort Worth Regional Office. The Department's review comments follow:

1. Cross-reference to incoming inquiry.

The proposed action is to replace the City of Las Cruces' existing wastewater treatment plant at its existing site with a plant utilizing a roughing filter followed by activated sludge treatment, which new plant would have a capacity of 8.9 mgd or approximately twice the old plant's capacity. Additionally, the City proposes to expand its service area slightly to conform to projected growth patterns, and to construct interceptor and collection sewers necessary to provide service throughout the urban area.

2. HUD comments on the Statement.

2-1 a. It would be helpful if the DEIS contained a schedule or timetable for construction of the system which would indicate the stage or stages when actual hook-ups would be possible or feasible.

2-2 b. Reference Flood Hazards on page 6-16, a Flood Insurance Rate Map for Las Cruces was issued by the Federal Emergency Management Agency which became effective on January 12, 1982.

2-3 c. The DEIS indicates that the delineation of the planning area was somewhat controversial. The DEIS might have considered the construction of a wastewater treatment facility with varying load capacities in the event that

2-1 Currently hookups are available although major new annexations such as the High Range development have been encouraged to use temporary, independent systems until the problems at the treatment plant are resolved. The current project schedule is presented on p. II-7 of the Final EIS and should be met if significant delays are not encountered.

2-2 Draft EIS p. 6-16 has been revised to reflect this information see Errata, Part III of the Final EIS.

2-3 This issue is discussed on Draft EIS p. 5-4, 5-6 and 5-7. The growth projections set forth in the EIS reflect the most likely future for Las Cruces, and are thus appropriate for planning purposes. A smaller facility would risk overloading before the end of the 20-year planning period. EPA policies prohibit funding for capacity beyond the need projected within the planning period. The collection system and plant are both planned so that they may easily be modified to accommodate changes in projected growth patterns.

2-3 (cont.) the population projections should prove inaccurate and/or that the development projected should occur in areas outside the planning area.

3. HUD comment on the Proposal.

HUD does not oppose the proposed action.

Our Dallas Area Office has provided the following additional information which has a bearing on the proposed undertaking:

2-4 "We suggest that EPA be informed that the Albuquerque Service Office of HUD presently has under review an application for mortgage insurance for a 552.9 acre subdivision to be known as "High Range." The proposed subdivision will provide 3,033 dwelling units to accommodate approximately 7,600 persons upon completion. The proposed subdivision is located immediately to the east of the Las Cruces Flood Control Dam. Roadrunner Expressway, a bypass highway between U.S. 70 and Foothills Road, will bisect the tract. The City of Las Cruces has designated the project as a Planned Community District (PCD) classification. The Subdivision is indicated on Figure 6-14, Future Pattern of Development, as proposed development in the DEIS.

"For the initial stage of development, a temporary septic tank system is proposed consisting of 12,000 gallon tanks. Each tank will serve no more than 43 dwelling units. The New Mexico Environmental Improvment District has indicated by letter that they will issue a permit for such a system. The City of Las Cruces has agreed to accept the maintenance of the temporary septic tank system. HUD will require the size of the individual lots meet its minimum property standards (MPS).

2-5 "The Dallas Area Office is in the process of preparing an EIS for the High Range Subdivision and plans to make distribution of the DEIS within the next month. The Albuquerque Service Office has several applications for smaller subdivisions where only Environmental Assessments will be prepared."

Sincerely,

Victor J. Hancock
Environmental Clearance Officer

2-4 This information was considered and incorporated into the population projections and the facility planning during the preparation of the Draft EIS and facilities plan.

2-5 This information has been noted.

3

Federal Emergency Management Agency

Region VI Federal Center Denton, Texas 76201

April 23, 1982

RECEIVED

APR 28 1982

6 ES

Mr. Clinton B. Spotts
Regional EIS Coordinator
U. S. Environmental Protection Agency
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

The following are our comments on the Draft Environmental Impact Statement (DEIS) for wastewater treatment facilities in Las Cruces, New Mexico.

3-1 1. The Flood Hazard Boundary Map (FHBM) for Las Cruces, dated May 6, 1977, which was used to make a flood plain determination in the DEIS, has been recently updated by a Flood Insurance Rate Map (FIRM), dated January 12, 1982. Copies should be on file in the Dallas EPA office. The flood plain delineation has changed slightly on the new FIRM.

3-2 2. In accordance with the City's flood plain management ordinance, portions of the sewer lines passing through the flood plain should be designed to minimize or eliminate filtration of flood waters into the systems and discharges from the systems into flood waters.

3-3 3. Improvements to the sewage treatment plant should not directly or indirectly encourage new development in the flood plain.

We hope these comments will be helpful. If we may be of further assistance, please let us know by writing this office or calling (817)387-5811, Extension 231.

Sincerely,

Cheryl A. Hoke

Cheryl A. Hoke
Emergency Management Specialist
Natural and Technological
Hazards Division

3-1 See response to comment 2-2.

3-2 The sewer lines will be designed to meet standards set by the flood plain management ordinance.

3-3 The City has an ordinance to prevent development in flood plains. The proposed action would not adversly affect enforcement of this ordinance.

4

United States Department of Agriculture

Soil Conservation Service

Box 2007
Albuquerque, NM
87103

April 9, 1982

Mr. Dick Wittington
Regional Administrator
Environmental Protection Agency
1201 Elm Street
Dallas, TX 75270

RECEIVED
APR 15 1982
6 ES

Dear Mr. Whittington:

Our office received a copy of the DEIS for the Waste Water Treatment Facilities at Las Cruces, New Mexico.

We have no comments on this proposed action.

Sincerely,

Jerry J. Ables Acting

Ray T. Margo, Jr.
State Conservationist

cc:
Chief Peter Myers, SCS, Washington, DC

RECEIVED
APR 15 10 ... AM
EPA

B-7

5

STATE OF NEW MEXICO

Department of Agriculture

GOVERNOR'S CABINET

BRUCE KING
Governor

Box 3189, NMSU Campus
Las Cruces, New Mexico 88003
Phone: (505) 646-3007

WILLIAM P. STEPHENS
Secretary

April 7, 1982

Mr. Clinton B. Spotts
Regional EIS Coordinator
EPA, Region 6
1201 Elm Street
Dallas, TX 75270

RECEIVED
APR 12 1982
6 ES

Dear Mr. Spotts:

I want to express my appreciation to you for this opportunity to provide our comments on the Las Cruces, New Mexico Wastewater Treatment Facilities Draft Environmental Impact Statement, published by the United States Environmental Protection Agency. While this is an adequate document, its recommendation for a new and improved plant should be reviewed.

Comments in this vein must be prefaced by the account to date on the present system. The Las Cruces plant is overloaded under present flow conditions which results in inadequate treatment of wastewater and violation of the P.L. 92-500 NPDES permit. At present, the city is still unable to meet the permit standards and this is in violation of part 2 of the New Mexico Water Quality Control Commission (WQCC) regulations. New Mexico WQCC is contemplating an assurance of discontinuance until standards are met. To counteract this, the city is considering at this writing a new plant at a cost in excess of $22,000,000. Also considered for construction is an interceptor system at approximately $10,000,000 and possibly new or replacement lift stations. This construction carries no guarantee that the changes will meet New Mexico WQCC regulations.

5-1

The WQCC has set New Mexico stream standards for fecal coliform bacteria at less than 1,000/100 milliliters. On page 6-15 of the EIS is this statement, "Available data indicate that fecal coliform levels increase in the Rio Grande from upstream to downstream. Coliform levels much higher than those given in Table 6-3 are reported in the water diverted by the City of El Paso water treatment plant where the geometric mean coliform count in 31 samples taken in 1977 and 1978 was 11,740 per 100 milliliters and the maximum was 380,000." If data is accurate, there is a possibility that effluent being let into the river may jeopardize crops such as vegetables and pecans through their quarantine or an embargo because of health risks.

5-2

5-1. See response to 5-3.

5-2. High coliform levels in Las Cruces's effluent have been due to two factors. One factor is that the chlorine feed mechanism is manually operated, making it difficult to respond accurately to changes in flow volume. This problem would be solved at the new plant by use of a flow-paced automatic feed mechanism. The other factor is that the high solids content in the effluent has made chlorination less efficient, since bacteria can attach to solids particles and, thus, be protected from the chlorine. With the high-quality effluent produced by the new treatment plant, this would no longer be a problem. Thus, Las Cruces effluent would meet coliform limitations, and health risks from the discharge would be minimized. Note that the coliform levels at El Paso reflect sources in addition to Las Cruces effluent; these sources also effect the quality of the river at El Paso, see the discussion on Draft EIS p. 6-11 through 6-16.

However, argument for a new or improved plant in the EIS, page 6-27 says that: "The improved quality of the effluent should result in better water quality as measured at Mesilla Dam." Several references throughout this draft impact statement refer to "should" or "possibly." In my opinion this vacillates on the probable results from construction and improvement. With the amount of expenditure contemplated no equivocating on these standards should be considered.

5-3

The citizens of Las Cruces have funded numerous expenditures on plant modifications over the last several years with little results. If a new plant is constructed, the least citizens should require is that the WQCC standards for New Mexico be met as a protection of the Rio Grande for irrigation, limited warm water fishery, secondary contact recreation, and livestock and wildlife watering.

5-4

A second significant impact in wastewater treatment is water rights. The EIS did not address water rights ramifications although they exist and have a potential for future ligation. Currently, the city is dissipating approximately 5,000 acre feet of water annually to the Rio Grande. In 2005, this figure should increase in excess of 9,000 acre feet. Since the basin has been declared, many changes have occurred and will occur. It is highly recommended that a request to the State Engineer in writing be made on the following:

5-5

> Existing and projected wastewater flows and return flow credit to offset new water appropriation for the city municipal and industrial needs. With such information available the city can plan in an orderly manner the purchasing or retiring of water rights and protect itself against legal movements as a result of water appropriation for city-municipal uses.

As a member of the New Mexico Water Quality Control Commission, my interest is in meeting obligations for clean water for the citizens of New Mexico. As the Secretary of Agriculture, my concerns also center on clean water for crop protection. A potential for a first class plant exists in Las Cruces. However, the present plant lacks proper operation, on-going maintenance and certified operators. There are large staff turnovers, and no personnel training or implemented hiring policies. Present circumstances indicate a need to implement sound procedures in the administration and management of the Las Cruces Wastewater Treatment Facility. Until good management occurs, continued expenditures of funds will not serve the citizens, will not forestall an assurance of discontinuance and will provide no protection for the river that sustains agricultural production in the southern part of our state.

5-6

Sincerely,

William P. Stephens

William P. Stephens

WPS/wpc

5-3. The proposed treatment facilities are designed to produce an effluent of such quality that stream standards for the Rio Grande will be met after discharge of the effluent. Unfortunately, it is impossible to provide an iron-clad guarantee that water-quality standards for the Rio Grande will be met. The quality of the river will be impacted by other sources, such as runoff from agricultural lands, sources shown on Draft EIS Figure 6-3, and perhaps other discharges that are presently unforeseen. Without a new treatment plant, however, continued violations of water-quality standards will certainly occur. It is precisely because the existing facilities have proved inadequate that Las Cruces now proposes to build new facilities which would protect the Rio Grande for designated uses.

5-4 Please see Draft EIS p. 5-8, 5-27, 6-27, 6-28, 6-65, and especially section 6.2.3.

5-5 See response 5-4, and letter and response 12.

5-6 See response to Issue 4, Part II. See also Table VII-8 of the facilities plan which presents proposed training.

6

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87503
(505) 827-5271
Thomas E. Baca, M.P.H., Director

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

April 13, 1982

Mr. Clinton Spotts
EPA, Region VI
First International Building
1201 Elm Street
Dallas, Texas 75270

RE: Wastewater Project C-35-1082-01, City of Las Cruces

Dear Mr. Spotts:

Attached please find for your files 2 copies of comments by EID personnel on the Las Cruces DEIS.

Please do not hesitate to call me if you have any questions concerning this material.

Sincerely,

Dedie Snow

DEDIE SNOW
Construction Grants Administrator

DS:vrt

xc: Ken Needham, City of Las Cruces
Lee Wilson and Associates
Gabe Garcia, EID, District III

RECEIVED
APR 19 1982
6 ES

EQUAL OPPORTUNITY EMPLOYER

6

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

DATE: 3-9-82

TO: Mark Jones, Environmental Improvement Division

FROM: Betsy Reed, Planning Bureau

RE: [illegible] DEIS Wastewater Treatment Facilities, Las Cruces
SAI NUMBER PROJECT TITLE

Planning Division
LEAD AGENCY

Please review and comment on the above application and return to the sender by [illegible]

1. Does this plan duplicate any programs which have similar goals and objectives to the proposed application?
_____Yes (If yes, please identify these programs.)
__X__No

2. Does the proposed application conform with a comprehensive plan developed for the area in which it is located?
_____Not applicable
_____Yes
_____No (If no, please explain in what way it is not compatible.)

3. Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local)?
_____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
__X__No

4. Describe any suggestions or means of improving or strengthening the proposed application.

_____No interest in, or comment on, this project.
_____Proposal is supported.
__X__Proposal is supported with recommendations. See Attachment
_____Proposal is not supported.
_____Further information needed, review suspended and applicant notified of request.
_____Comments attached.

On the basis of my review, I have indicated my response and/or recommendations above.

[illegible]
Signature of Reviewer

Environmental Review Coordinator
Title

March 26, 1982
Date

Environmental Improvement Division
Agency

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

6

NM HED ENVIRONMENTAL IMPROVEMENT DIVISION

DOCUMENT REVIEW & COMMENT FORM

TO: Surface Water Section
Jim M. Jones

FROM: Mark M. Jones
Document Review Coordinator
Program Support Bureau
Phone: 827-5271 ext. 457

DATE: Mar. 19 1982

PROJECT TITLE: DEIS - Los Lunas

LOCATION: Wastewater treatment S.A.I.#

Please review and comment on this proposal and return by _____ with all documents included. Answer a) all questions b) questions 1 through 4.

1. Does this proposal duplicate any programs which have similar goals and objectives?
   - ___Yes (Please Explain)
   - ✓No
   - ___Unknown
2. Does the proposal conform with a comprehensive plan developed for the area in which it is located?
   - ___No (Please Explain)
   - ___Yes
   - ___Not Applicable
   - ✓Unknown
3. Does the proposal conflict with any applicable statute, order or regulation (federal state or local)?
   - ___Yes (Please Explain)
   - ✓No (None Known To Conflict)
4. Describe any suggestions for improving the proposed project, strengthening the application, or any other comments (feasibility, cost effectiveness, alternatives, emergency need, health and safety factors, etc.)

   see attachment

___Proposal is supported.
___Proposal is supported with recommendations.
___Proposal is not supported, as explained.
___Further information is needed as specified.

On the basis of my review, I have indicated my response and/or recommendations above.

Jim M Jones	C = III	Mar 19 1982
Signature of Reviewer	Title	Date

___Check if you want a copy of the final review.

6

HEALTH ENVIRONMENT

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87503
(505) 827-5271
Thomas E. Baca, M.P.H., Director

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

M-E-M-O-R-A-N-D-U-M

TO: Charles Nylander, Program Manager, Surface Water Section

FROM: Ann M. Young, Surface Water Section

RE: Comments on the Draft Environmental Impact Statement for the City of Las Cruces

DATE: March 22, 1982

I think that the wastewater treatment plant chosen, Alternative #6, Roughing Filter-Activated Sludge, was a good choice because portions of the plant can be phased in.

6-1 Alternative #6 was given rating of "2" for operational ease and reliability (see table 5-9 for further explanations.) A treatment plant can be designed and built according to specifications but if it is not properly operated and maintained, it will soon fail to meet its design standards and soon show signs of premature aging. This problem was not sufficiently addressed in the DEIS, nor were the environmental impacts of a plant that is not properly operated and maintained. A related problem that was also inadequately addressed was the importance of a well structured and enforced Industrial Waste Ordinance.

6-2

6-3 According to the DEIS, the flow of 4.6 MGD would be split between the newly constructed roughing filters and the existing activated sludge plant. I am curious about whether the new plant will be able to meet existing standards by treating the entire 4.6 MGD, rather than splitting the flow and having to run both the new and the old plant. If it could, being greatly below its design capacity of 8.9 MGD, it would be a considerable savings to the Town, because the DEIS contends that the existing plant is very energy inefficient. The new activated sludge portion could then be added at a later date as the loadings increase.

Effective water conservation methods, including those described in the DEIS, will reduce sewer rates and postpone the construction of additional treatment units.

EQUAL OPPORTUNITY EMPLOYER

6-1 See response to 5-6 and to Issue 4, Part II. The problems which have occurred to date will be corrected by the proposed action and no adverse environmental impacts are expected from improper operation.

6-2 An EPA mandated industrial pretreatment program is an integral part of the City's overall wastewater management system as indicated in the facilities plan and associated pretreatment reports.

6-3 See discussion in Draft EIS section 5.3.3. Actual segmenting will be dependent upon funding. The City will operate the available (existing and new) facilities to achieve water-quality requirements while minimizing costs and energy use.

6

NM HED ENVIRONMENTAL IMPROVEMENT DIVISION

DOCUMENT REVIEW & COMMENT FORM

TO: _____

DATE: 4 March 82

FROM: Mark M. Jones
Document Review Coordinator
Program Support Bureau
Phone: 827-5271 ext. 457

PROJECT TITLE: Wastewater Facilities Plan

LOCATION: Las Cruces S.A.I.# 8203020180

Please review and comment on this proposal and ~~return by~~ _____ with all documents included. Answer a) all questions b) questions 1 through 4.

1. Does this proposal duplicate any programs which have similar goals and objectives?
   - ___Yes (Please Explain)
   - ✓ No
   - ___Unknown
2. Does the proposal conform with a comprehensive plan developed for the area in which it is located?
   - ___No (Please Explain)
   - ✓ Yes
   - ___Not Applicable
   - ___Unknown
3. Does the proposal conflict with any applicable statute, order or regulation (federal state or local)?
   - ___Yes (Please Explain)
   - ✓ No (None Known To Conflict)
4. Describe any suggestions for improving the proposed project, strengthening the application, or any other comments (feasibility, cost effectiveness, alternatives, emergency need, health and safety factors, etc.)

NONE

- ✓ Proposal is supported.
- ___Proposal is supported with recommendations.
- ___Proposal is not supported, as explained.
- ___Further information is needed as specified.

On the basis of my review, I have indicated my response and/or recommendations above.

Signature of Reviewer | Title: ENV | Date: 3/4/82

___Check if you want a copy of the final review.

B-13

6

NM HED ENVIRONMENTAL IMPROVEMENT DIVISION

DOCUMENT REVIEW & COMMENT FORM

TO: Gabriel Garcia
D3 - Las Cruces

DATE: 5 March 82

FROM: Mark M. Jones
Document Review Coordinator
Program Support Bureau
Phone: 827-5271 ext. 457

PROJECT TITLE: Wastewater Facilities Plan

LOCATION: Las Cruces S.A.I.# 82 03 02 0180

Please review and comment on this proposal and return by 17 March 82 with all documents included. Answer a) all questions b) questions 1 through 4.

1. Does this proposal duplicate any programs which have similar goals and objectives?
   - ___Yes (Please Explain)
   - X No
   - ___Unknown
2. Does the proposal conform with a comprehensive plan developed for the area in which it is located?
   - ___No (Please Explain)
   - ___Yes
   - X Not Applicable
   - ___Unknown
3. Does the proposal conflict with any applicable statute, order or regulation (federal state or local)?
   - ___Yes (Please Explain)
   - X No (None Known To Conflict)
4. Describe any suggestions for improving the proposed project, strengthening the application, or any other comments (feasibility, cost effectiveness, alternatives, emergency need, health and safety factors, etc.)

- X Proposal is supported.
- ___Proposal is supported with recommendations.
- ___Proposal is not supported, as explained.
- ___Further information is needed as specified.

On the basis of my review, I have indicated my response and/or recommendations above.

Gabriel Garcia | Envir. Engr. Spec. II | 3-8-82

Signature of Reviewer | Title | Date

X Check if you want a copy of the final review.

7

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

DATE: 3-9-82

TO: S.E. Reynolds, Water Resources Division

FROM: Betsy Reed, Planning Bureau

RE: NM 82 03 02-018 DEIS Wastewater Treatment Facilities, Las Cruces
SAI NUMBER PROJECT TITLE

Planning Division
LEAD AGENCY

Reproduced from best available copy.

Please review and comment on the above application and return to the sender by 4-9-82.

1. Does this plan duplicate any programs which have similar goals and objectives to the proposed application?
   _____Yes (If yes, please identify these programs.)
   _____No
   __X__Don't know

2. Does the proposed application conform with a comprehensive plan developed for the area in which it is located?
   _____Not applicable
   _____Yes
   _____No (If no, please explain in what way it is not compatible.)
   __X__Don't know

3. Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local)?
   _____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
   _____No
   __X__Don't know

4. Describe any suggestions or means of improving or strengthening the proposed application.

_____No interest in, or comment on, this project.
_____Proposal is supported.
_____Proposal is supported with recommendations.
_____Proposal is not supported.
_____Further information needed, review suspended and applicant notified of request.
__X__Comments attached.

On the basis of my review, I have indicated my response and/or recommendations above.

N.E. Reynolds
Signature of Reviewer

Chief, Water Rights Bureau
Title

April 6, 1982
Date

Water Resources Division
Agency

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

7

C[illegible]MENTS TO DRAFT EIS - LAS CRUCES WASTEWATER FACILITIES

p. 6-24-2nd paragraph.

7-1 The City's right to divert 17,040 acre-feet per annum was not based on the assumption that the City will continue to discharge all of its wastewater back to the Rio Grande and the wastewater will amount to about 50 percent of the water pumped. It is not absolute that the City would have to acquire water rights in the event the City reduces its wastewater discharge. It is the view of the State Engineer that he has neither the responsibilty nor the authority to control changes in the exercise of an existing water right which might result in an increase in consumptive use, unless the change involves a change in point of diversion or place or purpose of use such as would require a permit from the Engineer. In those situations in which a permit from the Engineer is required, such conditions as may be necessary to prevent any increase in consumptive use are imposed to avoid any impairment or detrimental effect on other existing water rights. Although the State Engineer apparently has no jurisdiction to control a change in sewage treatment, any downstream user who would be adversely affected may have recourse to the courts for relief by way of injunction or damages.

p. 6-24-3rd paragraph.

7-2 If it is correct that the predicted water use in year 2005 exceeds the City's existing water right and assuming the return flow to the river is 50 percent it would be necessary for the City to obtain the water right and retire 777 acres of /3,000 ÷ 2 = 1500 acre-feet depletion; irrigated agriculture has a consumptive irrigation requirement of 1.93 acre-feet per acre, therefore 1500 acre-feet ÷ 1.93 - 777 acres/.

p. 6-25-6.2.5-3rd paragraph.

7-3 It should be made clear that a permit is not required from the State Engineer for dewatering excavated trenches provided the water is discharged to a storm sewer, drain, canal or water course and none of the pumped water is placed to a beneficial use.

7-1 The text on Draft EIS p. 6-24 has been revised to reflect this information, see Errata, Part III of the Final EIS.

7-2 The text on Draft EIS p. 6-24 has been revised to reflect this information, see Errata, Part III of the Final EIS.

7-3 The text on Draft EIS p. 6-25 has been revised to reflect this information, see Errata, Part III of the Final EIS.

8

RECEIVED
JAN 3 1982
6 ES

PLANNING DIVISION
(STATE CLEARINGHOUSE)
REVIEW CERTIFICATION FORM **MIS 6**

STATE PLANNING DIVISION
DEPT. OF FINANCE & ADMINISTRATION
505 DON GASPAR
SANTA FE, NEW MEXICO 87503
(505) 827-2073

TO: Environmental Protection Agency DATE: May 21, 1982

SUBJECT: ☐ PRELIMINARY REVIEW ☐ STATE/AREA PLAN
☐ FINAL REVIEW ☑ ENVIRONMENTAL IMPACT STATEMENT

PROJECT TITLE: DEIS Wastewater Treatment Facilities, Las Cruces

APPLICANT: Environmental Protection Agency

SAI NUMBER: NM 82 03 02-018 FEDERAL CATALOG NUMBER: 66.418

FEDERAL AGENCY: Environmental Protection Agency

PROPOSED FUNDING (PER 424 FORM)	AMOUNT
FEDERAL	$
APPLICANT	
STATE	
LOCAL	
OTHER	
TOTAL	

FOR FINAL APPLICATION ONLY:

REVIEW RESULTS:

_____ The application is supported.
_____ The application is not in conflict with State, Areawide or Local plans.
_____ Comments are attached for submission with this application.

Kathleen G. Ortiz
LEAD AGENCY REVIEW COORDINATOR

Planning Division
AGENCY

TO THE APPLICANT:

You may now submit your application package, this form and all review comments to the Federal or State Agency(s) from whom action is being requested.

Please notify the Planning Division (Clearinghouse) of any changes in this project. Refer to the SAI number on ALL correspondence pertaining to this project.

Carla Sisneros
STATE CLEARINGHOUSE

May 27, 1982
DATE

Approved July, 1979
Secretary, DFA

STATE PLANNING DIVISION DIRECTOR

DATE

White: to Applicant.
Green: for Federal Agency.
Canary: SPD Copy.
Pink: Lead Agency.
Goldenrod: Federal Funds Tracking.

B-16

8

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

TO: Charles H. Greene, Agriculture Department DATE: 3-9-82

FROM: Betsy Reed, Planning Bureau

RE: NM 82 03 02-018 DEIS Wastewater Treatment Facilities, Las Cruces
SAI NUMBER PROJECT TITLE

Planning Division
LEAD AGENCY

Please review and comment on the above application and return to the sender by 4-9-82

1. Does this plan duplicate any programs which have similar goals and objectives to the proposed application?
_____Yes (If yes, please identify these programs.)
_____No

2. Does the proposed application conform with a comprehensive plan developed for the area in which it is located?
_____Not applicable
_____Yes
_____No (If no, please explain in what way it is not compatible.)

3. Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local)?
_____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
_____No

4. Describe any suggestions or means of improving or strengthening the proposed application.

_____No interest in, or comment on, this project.
_____Proposal is supported.
_____Proposal is supported with recommendations.
_____Proposal is not supported.
_____Further information needed, review suspended and applicant notified of request.
_____Comments attached.

On the basis of my review, I have indicated my response and/or recommendations above.

Signature of Reviewer

Chief, Admin. Services
Title

March 11, 1982
Date

NM Department of Agriculture
Agency

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

8

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

DATE: 3-9-82

TO: Bill Blackwell, Energy & Minerals Department

FROM: Betsy Reed, Planning Bureau

RE: NM 82 03 02-018 (SAI NUMBER) DEIS Wastewater Treatment Facilities, Las Cruces (PROJECT TITLE)

Planning Division (LEAD AGENCY)

Please review and comment on the above application and return to the sender by 4-9-82

1. Does this plan duplicate any programs which have similar goals and objectives to the proposed application?
   ____Yes (If yes, please identify these programs.)
   X No

2. Does the proposed application conform with a comprehensive plan developed for the area in which it is located?
   ____Not applicable
   X Yes
   ____No (If no, please explain in what way it is not compatible.)

3. Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local?
   ____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
   X No

4. Describe any suggestions or means of improving or strengthening the proposed application.

____No interest in, or comment on, this project.
____Proposal is supported.
____Proposal is supported with recommendations.
____Proposal is not supported.
____Further information needed, review suspended and applicant notified of request.
____Comments attached.

On the basis of my review, I have indicated my response and/or recommendations above.

Signature of Reviewer C.A. Engineer

Title C A E Engineer

Date 3/8/82

Agency EMD

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

B-17

8

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

DATE: 3-9-82

TO: Harold Olson, Game and Fish Department

FROM: Betsy Reed, Planning Bureau

RE: NM 82 03 02-018 (SAI NUMBER) DEIS Wastewater Treatment Facilities, Las Cruces (PROJECT TITLE)

Planning Division (LEAD AGENCY)

Please review and comment on the above application and return to the sender by 4-9-82

1. Does this plan duplicate any programs which have similar goals and objectives to the proposed application?
   ____Yes (If yes, please identify these programs.)
   ____No

2. Does the proposed application conform with a comprehensive plan developed for the area in which it is located?
   ____Not applicable
   ____Yes
   ____No (If no, please explain in what way it is not compatible.)

3. Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local?
   ____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
   ____No

4. Describe any suggestions or means of improving or strengthening the proposed application.

____No interest in, or comment on, this project.
____Proposal is supported.
____Proposal is supported with recommendations.
____Proposal is not supported.
____Further information needed, review suspended and applicant notified of request.
____Comments attached.

On the basis of my review, I have indicated my response and/or recommendations above.

Signature of Reviewer

Title Chief Planning

Date 3-17-82

Agency Game & Fish

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

8

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

DATE: 3-9-82

TO: Kate Wickes, Natural Resources Department

FROM: Betsy Reed, Planning Bureau

RE: NM 82 03 02-018 DEIS Wastewater Treatment Facilities, Las Cruces
SAI NUMBER PROJECT TITLE

Planning Division
LEAD AGENCY

Please review and comment on the above application and return to the sender by 4-9-82

1. Does this plan duplicate any programs which have similar goals and objectives to the proposed application?
_____Yes (If yes, please identify these programs.)
__x__No

2. Does the proposed application conform with a comprehensive plan developed for the area in which it is located?
_____Not applicable
__x__Yes
_____No (If no, please explain in what way it is not compatible.)

3. Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local)?
_____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
__x__No

4. Describe any suggestions or means of improving or strengthening the proposed application.

n/a

__x__No interest in, or comment on, this project.
_____Proposal is supported.
_____Proposal is supported with recommendations.
_____Proposal is not supported.
_____Further information needed, review suspended and applicant notified of request.
_____Comments attached.

On the basis of my review, I have indicated my response and/or recommendations above.

Signature of Reviewer

Bureau Chief, CRAP
Title

4-14-82
Date

HRD
Agency

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

8

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

DATE: 3-9-82

TO: Mark Sideris, Park & Recreation Division

FROM: Betsy Reed, Planning Bureau

RE: NM 82 03 02-018 DEIS Wastewater Treatment Facilities, Las Cruces
SAI NUMBER PROJECT TITLE

Planning Division
LEAD AGENCY

Please review and comment on the above application and return to the sender by 4-9-82

1. Does this plan duplicate any programs which have similar goals and objectives to the proposed application?
_____Yes (If yes, please identify these programs.)
__x__No

2. Does the proposed application conform with a comprehensive plan developed for the area in which it is located?
_____Not applicable
_____Yes
_____No (If no, please explain in what way it is not compatible.)

3. Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local)?
_____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
_____No

4. Describe any suggestions or means of improving or strengthening the proposed application.

_____No interest in, or comment on, this project.
__x__Proposal is supported. would from brochure to recreational locations of Southern NM for do A
_____Proposal is supported with recommendations.
_____Proposal is not supported.
_____Further information needed, review suspended and applicant notified of request.
_____Comments attached.

On the basis of my review, I have indicated my response and/or recommendations above.

Signature of Reviewer

Title

Date

State Parks & Recreation Division
Agency

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

8

PLANNING DIVISION
(STATE CLEARINGHOUSE)
MIS-4
Review and Comment

DATE: 3-9-82

TO: Robert H. Duran, State Highway Department

FROM: Betsy Reed, Planning Bureau

RE: NM 82 03 02-018 — DEIS Wastewater Treatment Facilities, Las Cruces
SAI NUMBER — PROJECT TITLE

Planning Division
LEAD AGENCY

Please review and comment on the above application and return to the sender by 4-9-82

1. **Does this plan duplicate any programs which have similar goals and objectives to the proposed application?**
   ____Yes (If yes, please identify these programs.)
   X No

2. **Does the proposed application conform with a comprehensive plan developed for the area in which it is located?**
   X Not applicable
   ____Yes
   ____No (If no, please explain in what way it is not compatible.)

3. **Does the proposed application conflict with any applicable statute, order, rule, or regulation (federal, state or local)?**
   ____Yes (If yes, please cite the conflicting statute, order, rule or regulation.)
   X No

4. **Describe any suggestions or means of improving or strengthening the proposed application.**
   I did not receive a copy of the EIS but I see no conflict with highways in the area.

X **No interest in, or comment on, this project.**
____**Proposal is supported.**
____**Proposal is supported with recommendations.**
____**Proposal is not supported.**
____**Further information needed, review suspended and applicant notified of request.**
____**Comments attached.**

On the basis of my review, I have indicated my response and/or recommendations above.

Signature of Reviewer

Environmentalist
Title

4-6-82
Date

NM State Highway Dept.
Agency

Approved July, 1979
Secretary, DFA

1 - white - to applicant
1 - yellow - SPD copy
2 - pink
1 - lead agency
1 - review division

B-19

8

State of New Mexico

Commissioner of Public Lands

ALEX J. ARMIJO
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO 87501

April 5, 1982

Ms. Betsy Reed
State Planning Office
505 Don Gaspar Avenue
Santa Fe, New Mexico 87501

Re: SAI # NM 82 03 02-018, DEIS Wastewater Treatment Facilities, Las Cruces

Dear Ms. Reed:

The Land Office staff has reviewed the Environmental Impact Statement for the wastewater treatment facilities for Las Cruces and have found nothing in the statement which affects State Trust Lands administered by this office.

Based on the maps included in this EIS, no State Trust Lands are involved. However, if pipeline routes should cross State Trust Lands, then the city will have to apply for rights-of-way across this land before construction starts.

Sincerely,

ALEX J. ARMIJO
COMMISSIONER OF PUBLIC LANDS

By: Siby M. Lucero
Administrative Assistant

AJA/SML/sbn

Reproduced from best available copy.

9

City of Las Cruces

April 6, 1982

RECEIVED
APR 9 1982
6 ES

Mr. Dick Whittington, Regional Administrator
Environmental Protection Agency, Region VI
1201 Elm Street - 1st International Building
Dallas, Texas 75270

Dear Mr. Whittington:

The City of Las Cruces conducted the final hearing on the Wastewater Facilities Plan and Environmental Impact Statement on March 29. As outlined in the attached schedule, we must begin design of the facility by June of 1982 so that plans and specifications can be presented in time to be eligible for the 75 percent funding level which will terminate in October 1984.

As shown on the attached schedule, it is imperative that we receive timely review and approval of our Facilities Plan and Environmental Impact Statement. The City of Las Cruces specifically requests EPA's firm commitment to reviewing and approving the Facilities Plan and Environmental Impact Statement by June 1982, and requests your assurance that this date will be met. 9-1

If this date cannot be met, the City of Las Cruces most likely will not be able to receive grant money at the 75 percent level. We further calculate that each day's delay in the construction of the facility costs all parties concerned approximately $8,000 to $10,000 in inflation alone.

I would appreciate your attention to this matter. The City staff and consulting engineers are prepared to assist your staff in providing anything necessary to facilitate your review and approval.

David M. Steinborn
Mayor

dw

Encl.

cc: NMEID

P O DRAWER CLC — AN EQUAL OPPORTUNITY EMPLOYER — LAS CRUCES, NEW MEXICO 88001 — PHONE 505 · 526 0000

9-1 This schedule has not been met. EPA believes the schedule set forth on p. III-7 of the Final EIS is attainable and will not interfere with 75 percent funding of the proposed improvements.

PROPOSED TIMETABLE

CITY OF LAS CRUCES WASTEWATER TREATMENT FACILITIES

29 March 1982	Final Public Hearing - Environmental Impact Statement (EIS) and Facilities Plan
12 April 1982	Hearing Record Closes EPA assembles material and forwards to Lee Wilson and Assoc.
19 April 1982	City Commission adopts Facilities Plan
10 May 1982	EPA prints and distributes final EIS
17 May 1982	Contract for design submitted to City Commission for approval contingent upon EPA approval of EIS and Facilities Plan
15 June 1982	EPA approves EIS and Facilities Plan Design begins
1 July 1983	Contract documents and Step III Application submitted to NMEID
1 October 1983	Step III Grant awarded
10 October 1983	EPA/Corps of Engineers authorize advertisement for Bids
25 October 1983	Advertisement for Bids
15 December 1983	Bids opened
1 March 1984	Construction started

10

Southern Rio Grande Council Of Governments
575 South Alameda St. City/County Office Bldg.
Las Cruces, New Mexico Zip Code 88001
Ph. 523-7474 State Network No. 588-5146

RECEIVED
FEB 24 1982
6 ES

February 22, 1982

Mr. Clinton B. Spotts
Regional EIS Coordinator
EPA, Region 6
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

Enclosed you will find the staff review of the City of Las Cruces, New Mexico Wastewater Facilities Plan.

The Southern Rio Grande Council of Governments concurs with the facilities plan and recommends the facility be funded.

Should you have any questions, please feel free to call me at (505) 523-7474.

Sincerely,

Albert T. Sanchez
Executive Director

ATS:emr

Enclosure

cc: Mr. Ken Needham, Director of Utilities
City of Las Cruces

Mr. Ralph H. Clark
Molzen-Corbin & Associates

10

CLEARINGHOUSE STAFF REVIEW

1. Project Title: City of Las Cruces, New Mexico Wastewater Facilities Plan
2. Applicant: City of Las Cruces, New Mexico
3. Federal Agency: Environmental Protection Agency(EPA)
4. Catalogue #:
5. Identify any existing activities which are similar to the proposed activity in terms of scope, type of activity and clientele.
None
6. Describe in precise terms the way, if any, in which the proposed activity differs from or complements existing activities.
None
7. Describe any respects, if any, in which the proposed activity is inconsistent with plans or policies of local governmental bodies in the area.
None
8. Does this program merit funding? XXX Yes _____ No

If yes why:
As stated in the Wastewater Facilities Plan(dtd. November 1981), the purpose of the proposed 9.9mgd wastewater treatment facility is to provide environmentally sound, nuisance minimized, cost effective wastewater management for the Las Cruces area. In view of the population growth from 1950 to 1979 and the projected population growth from 1985 to 2005(Tables II-1 and II-3), the proposed wastewater treatment facility is necessary to handle the growth projected for the Las Cruces area.

If no why:

Staff Stephen Sanches, Jr. - Planner

11

1417 North Mesquite St
Las Cruces, N.M. 88004
April 6, 1982

Mr. Clinton B. Spotts
Regional E.I.S. Coordenator
E.P.A. Region VI
1201 Elm St.
Dallas, Texas 75270

RECEIVED
APR 9 1982
6 ES

Dear Mr. Spotts:

After reviewing the draft EIS for the Las Cruces Waste Water Treatment Facilities we have the following comments:

11-1 1. On page 5-54 - the figure of $800,000 under Connection Fees seems unrealistic as that would require over 5,000 connections a year

11-2 2. Figure 5-2 on page 5.5 there are numerous errors in land designated for future development i.e. San Jose Cemetary.

11-3 3. Figure 6-11 Existing Land Use Map does not reflect a thorough study of the Las Cruces Zoning Map - a Las Cruces Ordinance

11-4 4. Figure 6-14 Does not agree with Las Cruces future land use map adopted by resolution. Schools, parks & Cemeteries have been designated for uses which will most probably not occur. Also development is indicated in flood plain areas.

11-5 5. Map 6-13 on page 6-62 does not properly delineate boundries between areas

11-6 6. Table 6-14 on page 6-67 does not indicate which entities are planning these investments when they are planned or the funding source. Senator Domenici's Office was unable to discover

11-1 Draft EIS p. 5-42 (where this statement appears) has been corrected, see Errata, Part III of the Final EIS.

11-2 Figure 5-2 on Draft EIS p. 5-5 is a very generalized map intended to show areas of existing development and the density pattern and direction of future growth. This provides a basis for identifying those areas where sewer service will need to be extended. Cemetaries and other such uses are considered developed and are incorporated with the density pattern of the area in which they are located.

11-3 The preparation of both land use maps, Draft EIS Figures 6-11 and 6-14, did rely on and incorporate data from the zoning map. Apparent conflicts arise from two facts: 1) the zoning map reflects the highest use to which the property may be put, when in fact the land may be developed in other uses, either lower density uses or in some cases older, nonconforming uses; and 2) the maps in the Draft EIS were prepared in the spring and summer of 1981 based on the 1980 zoning map which varies in some areas, particularly on the city's fringe, from the 1982 map which has been released since the Draft EIS was issued.

11-4 Figure 6-14, depicts the future pattern of development. It was not intended to have the detail of either a zoning or comprehensive plan map. It was intentionally generalized in response to CAC comments to avoid the appearance of setting specific future use for individual tracts. The map has been revised, however, to show schools and public uses which exist or are projected at this time (early 1982), see Part III of the Final EIS.

At the Public Hearing the comment was also made that both the existing and future maps contained many inaccuracies. Most of these were due to scale, as discussed above; inaccuracies not due to scale have been corrected and incorporated into the revised maps. Also see discussion of issue 3 in Part II.

11-5 The boundaries are shown correctly. They are based on census designations and delineate sub-areas used for population distribution in the EIS; the numbers in the sub-areas correspond to the population distribution areas listed in Draft EIS Table 6-13. Based on comments at the Public Hearing, the statement may be referring to a request for boundary designations for reference purposes. This change has been made, see revised Draft EIS Figure 6-13, presented in Part III on the Final EIS.

11-6 As stated on Draft EIS p. 6-66, these investments are funded through federal, state and local funds. These projects represent both current and projected improvements planned for the area. Some are longer term with no firm construction date set; most are within 5-year capital improvement planning periods. The Sand Hills Arroyo Dam is a project which the City feels is needed; the City is working with the Soil Conservation Service and Corps of Engineers to develop it. As the projects are in the planning stage the funding amounts, even the projects themselves (i.e. the I-70 north bypass) are subject to change. It is not felt that greater detail is needed for Draft EIS Table 6-14. The point of the discussion in the EIS is the location of planned and proposed capital investments in infrustructure in order to ensure that the proposed sewer system supports rather than conflicts with these investments. It is clear that the locality of active public investment in capital facilities is in the developing areas on the city's fringe, particularly north and east of the City.

11

-2-

any agency with firm plans for the dam on the Sand Hill Arroyo. Therefore we find the whole table suspect. If these improvement cannot be documented we feel this table should be eliminated.

11-7 7. on page 6-57, fegure 6-12 shows a Capital expenditure for Housing of over $800,000 per year. The City Finance Director says there is no such item in the budget.

We appreciate the opportunity to comment on the Draft EIS and wish to receive a copy of the final EIS.

Sincerely yours,

Anne E Kapp

Audie Sanders

Please Send my Copy to

Anne E Kapp

Box 1343

Las Cruces 88004

11-7 This figure is from the 1978 Capital Improvements Budget and represents planned expenditures for Housing Rehabilitation and Solar Retrofit projects, financed by a combination of loans (to be repaid by beneficiaries) and grants. The Housing Rehabilitation project is still active and has a budget of about $600,000 per year. The Solar Retrofit project, through the City, has been discontinued.

12

April 15, 1982

RECEIVED
APR 16 1982
6 ES

David Bollschweiler, P.E.
2115 Martha Drive
Las Cruces, New Mexico 88001

Environmental Protection Agency - Region 6
1202 Elm Street
Dallas, Texas 75270

REFERENCE: PUBLIC RESPONSE TO LAS CRUCES FACILITY PLAN - C-35-1082-01

Dear Mr. Spots

12-1 Please find submitted herewith one copy of a study that outlines the important details of two feasible alternatives to the proposed system described in the Facilities Plan. The concept of Rapid Infiltration treatment of the sewage effluent is in line with the established Environmental Protection Agency policy regarding the investigation of the feasibility of land application as a sewage treatment option. This policy is detailed on Appendix B of the submittal and confirmed as still operative by Mr. Kenton Kirkpatrick, Deputy Director of Water Management Division, Region 6, of the EPA. This process of Rapid Infiltration and its effect on groundwater has been discussed with Mr. Putnam of the State Engineers office in Deming. Mr. Putnam will receive a copy of this submittal for consideration and review. Mr. Davis of the Bureau of Land Management in the Las Cruces District office has been informed of the contents of this submittal and will receive a copy for consideration and review. Ms. DeDe Snow of the New Mexico Environmental Improvement Division in Santa Fe will also receive a copy of the submittal for consideration and review.

Although the submittal outlines the important details of the alternatives, detailed engineering calculations and descriptions of components are available upon request. Please do not hesitate to contact me if you have any questions or require additional information.

Thank you for your time and consideration.

Sincerely

David Bollschweiler

David Bollschweiler, P.E.

DB/ja

I HAVE READ THIS SUBMITTAL AND ENDORSE THE CONCEPTS AND APPROACHES AS TO FEASIBILITY.

Klaus Wittern

Klaus Wittern, Ing. grad.
P. O. Box 598
Mesilla, New Mexico 88046

12-1 In the initial screening of alternatives, rapid infiltration was rejected on the basis of its many environmental disadvantages and few if any benefits; it is not an effective approach for maximizing the long-term beneficial use of the area's physically limited surface-water resources. In particular, there would be a net consumption of water without any offsetting new beneficial uses. At some point, the City would need to acquire water rights to offset the increased consumption; this would require retirement of prime agricultural land, in conflict with applicable policies. This is the same conclusion which led to the statement on p. 5-27 of the Draft EIS, that land application as a treatment method was 'feasible only if it involves already existing farms, which could trade their water rights to the City in return for a guaranteed supply of wastewater'. No comments in support of rapid infiltration were submitted during the screening phase of the project.

Letter 12 sparked public interest in this alternative, and the implications were reevaluated in more detail prior to preparation of the Final EIS. (A copy of the specific proposal presented in the letter is available at the depositories listed on page II-1). The analysis confirmed several disadvantages and few benefits with regard to costs and water impacts as outlined below.

a. Costs. The proposal states that the rapid infiltration alternative would be much cheaper than the proposed action. The facilities plan engineer reviewed three major cost items (modification of existing facilities, pipeline construction, and disposal site), and found that the cost presented in the rapid infiltration proposal are underestimated by at least $6.5 million, raising the rapid infiltration costs from $11.5 to at least $18 million with 3 of 6 items considered. Thus the cost savings, if any, are not as significant as stated.

b. Water Loss. Assuming a Flushing Meadows type project and ponds over an area of less than 300 acres, total water losses to evaporation, soak-up and pipeline leakage would average about 20 percent of the effluent volume. In the year 2005, the loss would exceed 2,000 acre-feet per year. The evaporative loss from river discharge is but a fraction of this amount. Moreover, there is still river evaporation from rapid infiltration, once (decades hence) the water returns to the river system.

c. Water Quality. Rapid infiltration would degrade ground-water quality. Salinity impacts would be on the order of a 30-50 percent increase (in the water table immediately below the site); this might just be within standards. Unless some type of nitrogen removal is practiced, nitrogen loading from percolation basins must be assumed in excess of state regulations.

12

i

ENGINEER'S CERTIFICATION

I hereby certify that I am registered as a Professional Sanitary Engineer in the State of New Mexico and thereby licensed to practice as such. The system alternatives proposed herein have been researched through my personal efforts. The concept of Rapid Infiltration of the sewage effluent onto the West Mesa; the renovation and use of the existing sewage treatment facility; and, the production of energy from the incineration of sewage sludge (or MMR/Sludge) is protected by copyright

12-1 (cont.)

12-2

David Bollschweiler

David Bollschweiler, P.E.

d. Water Rights. The State Engineer would not assert jurisdiction over any action to change the exercise of an existing vested (unpermited) right. However, as stated in Comment Letter 7, the Engineer notes that "any downstream user who would be adversely affected may have recourse to the courts for relief by way of injunction or damages". The same comment was made with respect to EPA's Draft EIS for the City of Santa Fe, and in that project the Engineer provided additional information relevant to the evaluation of a land application or rapid infiltration project. Specifically he noted that:

-in the absence of New Mexico case law, the courts may follow Colorado precedents holding that a junior appropriator may insist that a senior appropriator maintain historic stream conditions;

-return flows offset the impacts of new water uses; absent such returns, more water rights are needed for those new uses;

-this circumstance and consideration of the cost of water rights suggest that careful attention should be given measures other than wastewater treatment by land application.

Since the close of the comment period on the Draft EIS, the New Mexico Supreme Court reached one decision which suggested that a City may be able to assert some claims to ownership of its return flow; however the extent to which this precedent would apply to Las Cruces is not clear. In evaluating this alternative, the EIS must make the worst-case assumption that a downstream user would litigate to require that Las Cruces retire water rights and 'replace to the river' the effluent which would be diverted to the mesas. Even if this litigation failed, the State Engineer has stated that, in acting on Las Cruces current applications for new well permits, the reduction of return flows to the river would increase the total requirement for water rights retirement. Based on analysis of a similar proposal performed in the Albuquerque EIS, the City could need to retire as many as 5000 acres of prime farmland by the year 2005 (compared to about 777 acres under the proposed action). This would substantially add to the costs of the rapid infiltration alternative, and represent a severe adverse environmental impact in a region where a high priority has been placed on protection of the agrarian economy and lifestyle.

e. Water Mangement. Even if the City prevailed in a water rights dispute, a rapid infiltration project would adversely affect the availability of water resources in the Lower Rio Grande Underground Water Basin. The basin already experiences water shortages in dry years. Thus, regardless of water-rights holdings, most users of surface water will not have enough water available physically during drought periods. The effect of effluent infiltration would be to create a new water demand in a water-short drainage basin. All planning for the future water needs of the area has assumed that return flows would be maintained (e.g. see ISC, 1975, p. 27). Also, removal of return flows would adversely impact the aquatic biota now sustained by effluent discharge in winter.

12-2 Sludge incineration has not been found to be cost-effective elsewhere, and there are no special conditions in Las Cruces which would make this approach more conducive.

13

Box 538
Mesilla, New Mexico
88046
April 11, 1982

Mr. Clinton Spotts
Regional EIS Coordinator EPA
1201 Elm St.
Dallas, Texas 75270

APR 14 1982

6 ES

Dear Sir:

This letter is in response to Mr. Miles invitation to present a written communication regarding the Wastewater Facility Plan presented in Las Cruces, New Mexico at 7:30 P.M. on March 29, 1982.

I was an active member of the Citizens Advisory Committee.

My main concern is the stinking lift station in Mesilla, which is located directly in front of a residence and the residence is bounded on the west by 12 apartments. This lift station was placed there by the City of Las Cruces with the approval of the EPA office in Dallas. I have tried to get this lift station moved or eliminated through attendence and participation in the above mentioned committee.

13-1 I have asked that a second sewer plant be installed to the south of Mesilla, hoping to get the lift station moved. The City of Las Cruces immeditely figured out that it would cost too much, rather than try to figure out if it could be done. According to my calcutations, the city share of a second plantwould be 12½% times $2,500,000.00, which does not amount to too much. I believe since the EPA is partially responsible for the placing of this lift station in Mesilla that EPA should correct this error.

13-2 Ifeel that since Las Cruces had a plan for waste water facilities plotted before all these public meetings were held and has refused to consider changes, that EPA should take a firm stand and do what is right.

13-1 (cont.) This lift station has been declared a public nuisance by the court and its location should be corrected.

13-2 (cont.) I further feel that the whole exercise of public hearings has been an exercise in futility. I do not feel that engineering has had an opportunity to engineer due to the City of Las Cruces supervision. The Joint Powers Committee refused to consider a unanimous recommendation, except for one vote, by the Citizens

13-1 The issue of the Barker Lift Station in Mesilla was considered during the planning process and discussed at the public meetings. The station is currently overloaded causing septic conditions in the lines which result in odors. Alternatives for resolving these problems are discussed in sections 5.2.2 and 5.2.3 of the Draft EIS and in Part III-C of the facilities plan. The recommended alternative is to construct a new force main and renovate the lift station; this will eliminate the problems associated with the lift station.

13-2 The alternative of constructing a plant to the south was considered, see Draft EIS section 5.3.3 and the facilities plan discussion beginning on page 100. This alternative was rejected because no major advantage would be gained, there is increased potential for adverse environmental impacts, and a southside plant would be more expensive than a plant in the vicinity of the existing site. Construction of a plant to the south would, also, not necessarily eliminate the Barker Lift Station as it would require an excessively deep outfall line. If a southside plant were built, it still might be more cost-effective to retain the lift station.

13

13-2 (cont.) Advisory Committee, to spend a little more time to get an optimum location for the sewer plant or plants.

13-3 As for the environmental impact; there are abundant waste lands south of Las Cruces, or a small plot of grounds, 12 acres, near the river, which is away from habitaion and connections could be prevented by law to protect agricultural land from housing development. Why weren't these things considered?

I wrote a minority report on the plant location which is a matter of record.

I am earnestly soliciting your assistance to correct a very bad situation.

Sincerely Yours,

Richard H. McCowen
Member of
Citizens Advisory Committee

cc: Judge Joe Galvan

13-3 These items were considered. Although waste lands may occur in the area, some of the largest and most viable farms are also located there, the land is currently under less pressure for development than land to north, fewer inroads have been made into agricultural lands, and public opinion as expressed at the meetings and by Mesilla city policies and regulations discourage development. Prohibition of hookups to the line would prevent development along the interceptor due to tie ins, but in the future, the presence of a plant to the south would increasingly stimulate pressure from developers and others to develop land south of Las Cruces. This development would be contrary to the policy of Mesilla, Las Cruces and the County all of whom are trying to preserve agricultural lands in the area.

Appendix C

APPENDIX C. PUBLIC PARTICIPATION EVALUATION

P. O. Box 3613
Las Cruces, New Mexico 88003
May 11, 1982

Ms. Diane Flock
Lee Wilson & Associates
P. O. Box 931
Santa Fe, New Mexico 87501

Dear Diane:

In response to your request for my evaluation of the public participation process for the development of the Las Cruces Wastewater Facilities Plan and EIS, I offer the following:

From my perspective as Chairperson of the Citizens Advisory Committee, the public participation process for the development of the Las Cruces Wastewater Facilities Plan and EIS was handled so as to provide ample opportunity for informed public input. Well-publicized public meetings were held following each of the major stages of the study; a final hearing was conducted by EPA. In addition to appropriate media presentations, copies of all reports and accompanying documentation were available to the public throughout the process. The Grantee was responsive to the issues raised by the public, and its action on the Citizen Advisory Committee recommendations reflected a concern for EPA and time stipulations involved in acquiring funding for the project.

It is true that public response to the plan was not overwhelming. In fact, responses came from a handful of people who reflected two main areas of interest: persons, including developers, with economic interests; persons with environmental concerns, including the concern for perservation of cultivated land from development, the concern for odor problems related to the present system, and a desire for an innovative system that would be attractive and energy-efficient. The general public did not seem overly enthusiastic. But I suspect the lack of enthusiasm stemmed not from the public participation process but from the fact that the public either was not interested or had other, more important things to do. Frankly, if the process was at fault, I think the fault lay in that regulations made it cumbersomely time-consuming and not in that it discouraged public participation.

If I can be of further help, please let me know.

Sincerely yours,

Jane Allen

Jane Allen